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VOLUME VI, NUMBER 3 JUNE, 1945

NIETZSCHE'S THEORY OF DECADENCE AND THE TRANSVALUATION OF ALL VALUES*

BY GEORGE DE HUSZAR

I

Nietzsche reduces all philosophical questions to psychological and even physiological terms. He distinguishes between two kinds of philosopher: "The one philosophizes out of his defects, the other out of his riches and powers. The former has need of his philosophy, whether it be as support, sedative, or medicine, as salvation, elevation, or self-alienation; with the latter it is merely a fine luxury, at best the voluptuousness of a triumphant gratitude, which must inscribe itself ultimately in cosmic capitals on the heaven of ideas."

Nietzsche's critique of all forms of decadence is based on this fundamental distinction. He uses the term "decadence" in a broader and deeper sense than literary historians who employ it either to indicate the presence of critical mentality and the cult of form or, in the modern sense, to refer to writers like Baudelaire and Proust. (According to Nietzsche, all philosophies, religions and arts which spring from weakness are decadent.) He combats them not as one would refute an error, but as one would fight against disease. His critique is not that of a philosopher but that of a physician.) Physiology is to him the criterion of value, the sole arbiter of what is good or bad. Yet it must be emphasized that he uses the term "physiology" in a broad and somewhat vague sense. The central term of his philosophy, "power," cannot be a purely physiological category for he considered Tolstoy and Brahms, who enjoyed good health throughout their lives, as decadent, and Maupassant and Mozart, who suffered from bad health, as non-decadent. Moreover, the German word *Macht* has a broad meaning, while the English word "power" implies brute force and domination. Thus there are persons who when they read "power" think of machine-guns, when they read "health" think

* This paper, together with the two following and the ensuing discussion, formed a symposium in celebration of the centenary of Nietzsche's birth, October 15, 1844, held in New York City on December 3, 1944, under the auspices of the Conference on Methods in Philosophy and the Sciences.

of muscles, when they read "aristocracy" imagine a man with top-hat. Such literal interpretations account for the current misunderstanding of Nietzsche which associates him with the Nazis. But to Nietzsche "power" usually means something intrinsic—power *in* man and not *over* man—and not something extrinsic. It is synonymous with vitality, enthusiasm, *virtú* in the Renaissance sense.

Physiology understood in a non-scientific sense is extremely important in Nietzsche's thought. He might well have adopted for his motto a rephrased version of Pascal's maxim: "The stomach has its reasons which the head does not understand." It is probable that Nietzsche arrived at his critique of morality through comparative philology, though he later put it in physiological terms. In his autobiography he expresses regret for having been ignorant of physiology in his youth, for becoming a philologist and not a doctor. In later life he was much preoccupied with diet and climate, and in *Ecce Homo* he asserts: "I am much more interested in another question—on which the salvation of humanity depends much more than upon any piece of theological curiosity: the question of nutrition." Here again he employs the term "nutrition" in a wider sense than mere diet, though that itself is of great importance to him.

From the point of view of the distinction quoted the whole history of philosophy and religion appears in a new light. Practically all the philosophies and religions of the past have resulted from a disgust with life, with pleasure, with the temporal. Nietzsche pondered a great deal over the physiology of exhaustion and came to the conclusion that the judgment of the exhausted has prevailed to a great extent in the world of values; our highest philosophical, religious, and moral values are the work of the weak. Such values were born of life in decline and are consequently hostile to it.

Nietzsche's critique of decadence was applied mainly to Greece, Christianity, and the nineteenth century. He considered Socrates as the supreme example of Greek decadence. He more than anyone else is responsible for the destruction of the wonderful sixth-century Greece. Socrates is the theoretical man, anti-musical, anti-lyrical, anti-artistic, anti-Dionysian, and essentially anti-Greek in his negative attitude toward life. He is obsessed with abstract concepts and dialectics; his vulgarity is manifested in

his continual arguing. Taste and instinct are absent in him and he fails to realize that what needs to be proven cannot be worth much. Socrates represents the theoretic as against the tragic world-view and marks the transition in Greek life from drama and poetry to logic and morality. He opposes art and extols ethics and is responsible for the "weirdest equation" in the history of philosophy: Reason = Virtue = Happiness.

Socrates not only ruined sixth-century Greece but also corrupted Plato, who became hostile to the instinctive foundations of Greek culture, antagonistic to the body, to tragedy, to all manifestation and love of life. Nietzsche finds it regrettable that it was the degenerate Greek culture of Socrates and Plato which had the greatest historical influence, while pre-Socratic Greece was almost completely forgotten until he rediscovered it. This corrupt Greek culture prepared the ground for Christianity. Socrates emphasized morality, and Plato's hostility to instinct and life centered attention upon the destiny of man in some other world. Nietzsche calls Christianity "the Platonism of the people."

Christian morality also negates life, condemns its qualities; it is the product of decadents who were not content to fashion Christian values for themselves but succeeded in avenging themselves upon life by making the strong and healthy sick too. The Christian decadent, instead of admitting "I am no good," insists like the pessimist that "life is no good," but unlike the latter invents Heaven to compensate for earthly unhappiness. Christianity is thus otherworldly hedoism. The need for another world is always a sign of decadence.

The nineteenth century is a decadent epoch *par excellence*. It admired the Socrates of modern times, Kant. It is also characterized by the superficial optimism of Mill, Spencer, and Huxley as well as by romanticism and pessimism. Just as Socrates is the great decadent of Greece and Paul of Christianity, so Wagner and Schopenhauer are the great decadents of the nineteenth century. The former ended as some sort of Christian, the latter is the principal pessimist of modern times.

Hedonism is the basis of Heaven. When this otherworldly Heaven disappears, man seeks to realize Heaven on earth. Unable to realize hedonistic values in this world, he is forced into pessimism. It is always from the point of view of the disproportionate amount of pleasure that the pessimist judges the world bad.

Unlike the adventurer who is always a gambler, he sits alone in his room at night like an accountant, crouching over a table carefully tabulating the pains and pleasures of this world and finding that the debit side outweighs the credit side.

The prevalence of hedonism is always a sign of decadence. Thus pessimism is not a problem but a symptom. "Pessimism of sensibility" based on hedonism renounces life because the total sum of pain is greater than that of pleasure. This kind of pessimism underlies Stoicism, Epicureanism, Buddhism, and Schopenhauerian philosophy, doctrines which share a horror of emotion and impulse and seek comfort and tranquillity. All such yearning for selflessness, dread of pain, and longing for bliss are symptoms of decadence.

The Schopenhauerian pessimist refuses to suffer any longer. He prefers non-living to living, and Nirvana—slowly killing oneself without dying—becomes his ultimate goal. Schopenhauer, to whom the Will was the *bête noire*, must have experienced a singular horror when realizing the blind biological forces of the world, similar to the horror Pascal felt when looking at the vast physical universe.

II

Because Nietzsche is such an uncompromising critic of decadence, many have hastily concluded that he is primarily a destroyer and a blasphemer. It is true that he had the daring to question everything that has been dear to western man since the collapse of the pagan world. In this capacity he is the greatest intellectual pirate in the modern world, who hoisted the black flag and declared war on all idols.

But a critique is often a prerequisite to the formulation of a faith. Dostoievski's Christianity is preceded by a vast critique of non-Christian life, the consequences of which are portrayed among other works in *The Possessed*. Kierkegaard likewise engaged in a thoroughgoing criticism of the "aesthetic" stage, brilliantly stated in the second part of *Either/Or*. Schopenhauer too indulged in a criticism of the validity of pleasure and individual will, and then proposed his road to salvation. Or to take a more recent example, Proust's whole work is nothing but a censure of his two idols: Love and Society. Only after they turn out to be illusions does he emerge with his positive vision of art and time.

Nietzsche must be viewed in similar terms. His critique of decadence constitutes a prolegomenon to a (he would say *any*) future philosophy in the same sense that Kant's critique of pure reason is a prolegomenon to any future metaphysics. Nietzsche does not censure merely to destroy but to surpass. His disgust with the human-all-too-human is not an end but a beginning. The despiser is not a negative person: "I love the great despisers, because they are the great adorers, and arrows of longing for the other shore." Those who, like his sister, called *Thus Spake Zarathustra* a bitter book do not realize that Nietzsche was a believer. To view him as bitter or as a mere critic would be as much of a mistake as to consider Dostoievski—a most hopeful and positive writer—merely gloomy.

The critique of decadence is prerequisite to the transvaluation of all values. This transvaluation is a difficult task, because it involves the valuation of precisely that which in the past has been devalued: this world and this life. The religious and philosophical traditions have degraded this world into mere appearance and made an absolutely false world, that of Being, into Reality. Almost all the philosophers of the past, who were actually priests in disguise, have a hatred of life and are prejudiced against appearance, change, the senses and instinct. Philosophy in the words of Nietzsche has been a "grand school of slander."

The clinging to the dogmatic certainties of philosophy and religion—Truth, Unity, Purpose—is of psychological origin. The quest for certainty in religion and philosophy is, psychologically speaking, a search for security. The other world and this-worldly meliorism assume that something will be eventually *attained*. This is especially true of Christianity and its secularized form, the theory of progress.

The obsession with Truth and the Absolute is a sign of pathology, while "objection, evasion, joyous distrust, and love of irony are signs of health." The strong man accepts the world of becoming and finds value in change, chance and variety, and does not yearn for changelessness, certainty and uniformity. He finds tragic delight in cosmic disorder without God and seductiveness in terror, uncertainty, and chance. He can live by probabilities and bids farewell to every fixed opinion and desire for certainty. The transition from God to a Godless world is consequently not a philosophical but a psychological, even a physiological, problem.

It is a question of power and health. Perhaps vitamins will turn out to be a greater threat to Christianity than were Copernicus and Darwin.

Too long has man lusted after strange gods, too often has he been sacrificed on the altar of some transcendental idol, too often has life been put at the service of some abstract ideal. Man cannot possess or be significant in the universe; looking up to the stars will not give him the answer to his quest. In the stars there are no secrets to be revealed and no treasures to be found. Nietzsche is not interested in Truth, Beauty, and Morality as such. He revalues them in terms of his basic concept of power. They must be means for the enhancement and affirmation of existence, and not means to escape from it.

While Pilate raised the question "What is truth?" Nietzsche asks another significant question, which has been neglected by philosophy, "What is the value of truth?" And truth is whatever enhances the intensity of living. "All is truth to me that tends to elevate man." Illusions are justifiable provided they increase the enjoyment of life. By making illusion a condition of life Nietzsche impugned the traditional ideal of philosophy, which advises man to shun illusions which stand between him and the supposed Truth. As Marx inverted Hegel, so Nietzsche inverted Plato by asserting that value often varies inversely with truth.

Nietzsche opposes *l'art pour l'art* and the Kantian and Schopenhauerian view of art. Kant thought that he had honored art by giving it qualities which belong to knowledge: impersonality and universality. Schopenhauer reinterpreted Kant's theory of the disinterestedness of aesthetic experience to imply willessness. He stressed the liberating function of art. He conceived it as pure contemplation wherein man loses his individuality, becomes willess and thus escapes suffering. The religious, philosophic and artistic decadent aims to counteract passion; one hopes for deliverance, the second for wisdom, while the last takes refuge in the contemplation of the beauty of form. Nietzsche follows Stendhal's view of art, which finds the essence of beauty in the excitement of the will. Art is the great seducer and the great stimulus to life.

Morality too must be put to the service of deifying existence and power, instead of denying them, as has been the case since Christianity. "What is good?—Whatever augments the feeling

of power, the will to power, power itself, in man. What is evil?—Whatever springs from weakness."

Thus it is an error to make a standard of life out of a means to life. But life itself cannot very well be a criterion of value, for it is all-embracing—everything is life. Life, however, is not a fixed entity—there are degrees of living, more or less life. Most philosophies and religions have sought one type of life; that of salvation, rest, and certainty. Hedonism is implicit in the search for this type of life. "Pessimism of sensibility" realizes the interdependence of pain and pleasure and wishes to reduce life in order to reduce suffering. Buddha and Schopenhauer yearn for Nirvana, the Stoic seeks indifference, and the Epicurean selects some experiences and rejects others.

But while it is possible to go through life without great pain, great joy will be lacking too, for pain is the father of joy, and suffering and happiness grow together or remain small together. Nietzsche realizes the connection between pain and pleasure, but not being hedonistic in his outlook, he says Yea to both. Since the choice is not between either pleasure or pain, but either pleasure-pain or tranquillity, he affirms the former. He who wants the greatest possible exaltation must also bear the greatest possible pain; he who wants to experience the highest intensity of life must also be ready to know its deepest abysses.

In contrast to all forms of decadence, Nietzsche proclaims the "pessimism of strength" which says Yea to life in spite of all its terrors and pains. Such pessimism does not lead to resignation but to heroism. The person who transvalues his values finds tragic delight in life. He is not a stranger in a world he never made. Fate is cruel but the strong man can love it while the wise can only contemplate it.

To heighten the sense of living, Nietzsche advises man to live dangerously. In contrast to the advice of Christ, which is typical of the religious and philosophical quest for safety and certainty, he recommends that man should build his cities on the slope of Vesuvius. The highest formula of such living is expressed in the symbol of Dionysus. Nietzsche calls himself the last disciple and initiate of the God Dionysus whose spirit is expressed in tragedy. Thus he is essentially a tragic philosopher—the very antithesis of a pessimistic philosopher. According to Nietzsche both Aristotle and Schopenhauer misunderstood the essence of tragedy when they

thought of it as a catharsis or as something leading to resignation. Its aim is not to get rid of terror and pity or to lead to resignation; it is a tonic, an exaltation in the face of the terrible, a victory over fearfulness. Such a tragic attitude saves us from enjoying small victories and despairing because of great defeats.

Nietzsche's primary concern is not only with the *kind* of life we should lead but also with the *kind* of man we should be. The transvaluation of values is not only a transition from weakness to strength, but also from man to superman.

The highest type of man is characterized by self-affirmation, self-will, and self-love. Such egoism has to be sharply differentiated from the sickly self-love which is acquisitive and parasitic. The inner void of the sickly egoist urges him to attach himself to an *Other*. While the weak seek union, the strong strive for isolation. The highest type of man will be strong enough to resist the temptation of getting rid of his self by relating it to an *Other*. The concept of an *Other* is implicit in Christianity and in romanticism. One prevalent form of the romantic losing of self is through romantic love. Both Christianity and such romanticism are yearnings centered around someone. Man is continually in search of something he can worship and with whom he can achieve intimacy in order to overcome solitude. For the religious and romantic person the center of gravity is outside the self. Like Archimedes they seek one secure point in the universe. The romantic person is nothing in himself, he is what he is through a relationship to an *Other*. There is a contradiction in the romantic who spends his life developing and cultivating his individuality and uniqueness and then wishes to get rid of them: e.g., Stendhal.

The superior man has at all times been in revolt against God and has sought to develop the utmost individuality. His fate in the ancient world, the fate of Prometheus, was a sad one. With the possible exception of Faust, his fate has been likewise sad in the modern world. Three novels of the nineteenth century well illustrate how the *Other* prevents the full development of a superior man. Raskolnikov becomes a Christian through Sonia—even though it is doubtful whether she is symbolic of the Madonna—for obvious reasons. Bazarov and Julien Sorel are diverted from their chosen road by catching *romanticitis;* neither of them can resist the feminine, all-too-feminine.

Nietzsche's glorification of self-will and self-consciousness

stands in absolute contrast to the Christian who hates the "I" and the romantics who wish to lose their selves, as well as to three of the greatest minds of the nineteenth century, Schopenhauer, Dostoievski and Kierkegaard. In his opposition to individual consciousness and self-will, the atheist Schopenhauer is in agreement with the Christian Dostoievski. Kierkegaard, in spite of all his concern with "inwardness" and the "individual" as the supreme category, offers the "I" to God. In this respect of developing individuality and then offering it to an *Other,* Kierkegaard's position is analogous to that of Stendhal.

Nietzsche's announcement that "God is dead" and that "man is a bridge not a goal" is a challenge to the two greatest philosophical traditions of the West, theism and humanism. Dostoievski could not conceive one without the other, he believed that by killing God man too would be destroyed. Kierkegaard likewise asserted that he who has lost God has lost himself as well, "for if he has no God, neither has he a self." It is the very essence of Christianity that man finds his self through relating it to God.

Nietzsche saw in the murder of God the prerequisite for the utmost development of the self. He was pleased neither with God nor with man, and as an alternative invented the superman. A profound man must either have a God or become one. Perhaps God was invented because man could not find his fellowmen worthy of respect and worship. For the more one looks at man, the more necessary it becomes to believe in God. The superman too is to a great extent a protest, a result of disgust with the human, all-too-human. Nietzsche might have woven this dream of haughtiness out of embitterment.

Yet the superman is more than an ideal and a hope. Nietzsche believed firmly in the possibility of such a man. The very decadence of modern times will enable some men to surpass themselves as never before. The opposing forces of this age will force some to become great. Those who survive these forces will be "strong as the devil." In Nietzsche's vision of the coming of the superman there is a great deal of messianism. A similar messianism can be found in Kirilov's famous remarks about the coming of the new man. Nietzsche explicitly states that the superman has not yet existed and that it may take hundreds of years before he will come into being. In view of this fact we cannot expect the figure of the superman to be clearly drawn. His image is vague, but

not so vague as to allow us to classify under this type: Hitler, Goethe, Zaharoff, the newspaper cartoon figure, emancipated beings who are supposed to be beyond good and evil, Caesar, and the all-American football hero.

The superman will possess the utmost elevation of man's consciousness of strength. In contrast to an Obermann who has maximum individuality and a minimum of strength, the superman will have a maximum of both. Though Dionysian exaltation and intoxication will be at their highest in him, he will by no means be unbridled. He will not weaken or extirpate his passions but will control them. The greater the dominating power of the will, the greater the freedom that may be given to the passions. The superman will possess the greatest multiplicity of contrasting urges, in the greatest strength in which they can be borne. The subtlest, most wanton and fearful qualities will be found in him. Yet he will not dissolve into multiplicity, irresolution, or anarchy of instincts, for the unifying power of will will be paramount. He will also possess a halcyon quality, light feet, ubiquity of mischievousness, and exuberant gaiety. But he will not be an effeminate type, and will *resemble* Caesar Borgia more than Parsifal. His very essence will be *amor fati,* saying Yea to all that is terrible and questionable in existence, including that most abysmal thought: Eternal Recurrence.

III

To Nietzsche the transvaluation of all values is not an intellectual problem—it is something to be experienced. The philosophical statement of transvaluation is but the counterpart to a psychological process of transmutation from weakness to strength, from disease to health. Unless this psychological process is experienced, transvaluation is but an empty intellectual exercise, a mere revision of opinion. To achieve transvaluation it is necessary to go through an experience like Nietzsche's own.

Nietzsche explicitly states that he was just as much a child of his age, a decadent, as Wagner. No one has been so dangerously involved in Wagnerism as he. The great difference between him and Wagner is that he recognized the fact of decadence and struggled against it. He further states that the greatest fight of a philosopher is to overcome his age in himself: "I had to side against all that was morbid in myself including Wagner, including

Schopenhauer, including the whole of modern humanity. . . . The greatest event of my life took the form of *recovery*. Wagner belongs only to my diseases."

From a psychological point of view the key word in the transvaluation of all values is "overcoming." It makes a great deal of difference whether one is insensitive or overcomes sensitivity, whether one is strong or overcomes weakness, whether one is hard or overcomes sentimentality, whether one is immune to suffering or triumphs over pain, whether one is healthy or overcomes illness. Nietzsche himself experienced all these trials of overcoming. The values of the "pessimism of strength" were not his birthright; he had to achieve them. By nature he was gentle, sentimental, and sensitive. He was able to live up to his motto "become hard" only at the cost of the self he was born with. His spiritual health and strength were not primary, they were acquired. And the transformation of Herr Professor Dr. Friedrich Nietzsche, eminent philologist at Basel University, into the last disciple and initiate of the God Dionysus, was not an easy task, the utmost will and self-mastery were needed.

As a diseased man desires to be healthy, so pessimism will eventually lead to optimism, provided one has sufficient vitality and will. As the sick man rediscovers the value of health, so the man in despair rediscovers the value of life, and such rediscovery will make life sweeter than merely taking it for granted. "What is happiness?—The feeling that power *increases*—that resistance is overcome." To get well is not just to achieve a normal condition, it is an ascension. Since spiritual power is measured by the resistance overcome, he who experiences the deepest abysses and surmounts the greatest difficulties will be the strongest—"whatever does not kill him makes him stronger."

Transvaluation is the philosophical expression of the problem of attaining health. This problem of convalescence is central in Nietzsche's thought and life. He affirms that it was in his years of worst health that he ceased to be a pessimist. We may wonder at such a paradoxical statement and suspect his good faith, as some have done, when a sick man like him affirms his belief in the fundamental excellence of life and calls himself an optimist. But it is precisely this *volte-face* which is the essence of the psychological process of transvaluation. To achieve this *volte-face* is an act of will and presupposes some element of power. In certain

cases weakness may be an initial phenomenon, "not enough," in others a final phenomenon, "no more." Illness can be the stimulus to a higher health, but one must have sufficient power to turn to profit what would ruin the mediocre man. Since in transvaluation man himself changes, and not only his opinions and attitudes, it is a temptation to compare the process with conversion. But the analogy does not hold, for the latter is a sudden transformation and not at all an act of will.

To descend into the seventh circle of hell and still to hope, wish, and will affirmation is a difficult and cruel fate. The blessed smile of Buddha or the cross has a strong appeal for the man in the grips of the *dunklen Drang*. Hope is a dubious value, and resignation—illustrated by the Russian soldier who when the campaign becomes unbearable lies down on the snow—is a great relief. But Nietzsche does not allow resignation or the consolation of tears. In this respect his message is bitter, one curses him at moments like this. But "what makes a man heroic? To face simultaneously one's greatest suffering and one's highest hope."

A person who has been through, who "has been familiar with, and 'at home' in, many distant, dreadful worlds," will have an entirely different psychology from one who has not. The difference between "primary" and "secondary" is of the utmost importance. Real freedom is acquired freedom, it is secondary and not primary. It does not consist of indifference and inability to form a tie, but in overcoming the temptation to do so. It is only those who have experienced human bondage who know the meaning of human freedom. Hardness that is acquired, secondary hardness, is not the insensivity of the barbarian or the philistine. Real courage does not consist in being unaware of danger but in mastering fear and terror—it is secondary rather than primary. Secondary healthiness, or as Nietzsche called it "great healthiness," does not consist in never having been ill, but in overcoming all decadent elements. To laugh at everything because of an inability to see anything as serious is different from being a clown after profundity, after having seen to the bottom of everything. And finally, secondary happiness which comes as a result of triumph over despair, is more refined and exquisite than primary happiness, mere contentment. Such Dionysian happiness comes from a superabundance and overflowing of strength and is expressed in Beethoven's triumphal Song to Joy in the *Ninth Sym-*

phony. It is essentially the result of victory, of recovery, of gratitude.

Decadence, philosophically as well as psychologically, is not a permanent condition, but a prerequisite to superior health. Nietzsche himself never achieved a complete transvaluation of all values. But he himself admitted that "a prelude am I to better players!" And in his life and work he performed what he considered the highest task of the philosopher: to set an example.

His transvaluation is a unique way of solving the age-old problem of pessimism. What makes his affirmation especially significant and unparalleled is that it was proclaimed to the world in the nineteenth century, a post-Kantian and post-Hegelian world where thinkers and poets were in the grip of despair. None of these figures except Nietzsche ever *overcame* pessimism. It is always the same story: hopeless despair (Leopardi, Lenau, Sénancour), Stoic resignation (Vigny), collapse before the cross (Kierkegaard, Dostoievski, Wagner), Buddhistic yearnings (Schopenhauer), or solace through art (Gautier, Flaubert). It is impossible to find among modern thinkers, and perhaps among any thinkers, one who when in despair did not seek a metaphysical soft-pillow, or the cross, or Nirvana, or comfort through aesthetic contemplation.

There have been affirmations before Nietzsche, but they are superficial optimisms like the primary optimism of Leibniz or Huxley. The optimism implicit in the Dionsyian outlook is secondary: it is the result of overcoming and triumphing over pessimism. The greater the depth to which one descends the higher will be the swing toward affirmation. To be really strong one must have been weak; to be an optimist—in the Nietzschean sense—one must have been a pessimist. Nietzschean optimism, being secondary in nature, is a more emphatic Yea-saying than mere primary optimism.

The unique significance of Nietzsche lies in the fact that he was the last to attempt a tragic justification of life, the last to take the Greeks seriously—for the recent neo-classicism is watered down considerably with Christianity. His ultimate vision of achieving a tragic outlook, of great healthiness, of the superman, can never become popular. While many may find Nietzsche a great stimulus to life, while psychologists may explore his insights, and critics may learn from his analysis of decadence, this ultimate

vision is difficult to accept and still more difficult to follow. "But," as Spinoza remarked, "all excellent things are as difficult as they are rare."

It is the very essence of the Dionysian man that though he bears the heaviest burden he is the lightest spirit—for Zarathustra is a dancer.

> Ye look aloft when ye long for exaltation; and I look downward because I am exalted.
>
> Who among you can at the same time laugh and be exalted?
>
> He who climbeth on the highest mountains, laugheth at all tragic plays and realities.

Golden laughter and lyricism—when everything heavy becomes light, when one becomes a dancer, and a bird—is Nietzsche's Alpha and Omega. This lyrical, limpid, and joyous South, this secondary innocence, is the land *beyond* tragedy.

No one has descended so far into the abyss as Nietzsche. To have had the courage not to turn back is heroic enough, but to go to the very depths and neither to seek escape nor to bear witness against life, is unprecedented in intellectual history. Having descended to the bottom, Nietzsche began to rise. Forsaking his friends, his illusions, he soared upward, higher than his beloved snow-clad Alpine mountain tops. It seemed that nothing could stop him in his flight; but, like Icarus, he came too close to the sun and was destroyed.

Like another seeker after the sun, Van Gogh, who lived among miners, Nietzsche's message is symbolized by the abyss and the sun, by shadow and joyousness. "To be sure, I am a forest, and a night of dark trees: but he who is not afraid of my darkness will find banks full of roses under my cypresses."

University of Chicago.

NIETZSCHE'S DOCTRINE OF ETERNAL RECURRENCE

By Karl Löwith

"That the separate philosophical ideas are not anything optional . . . that, however suddenly and arbitrarily they seem to appear in the history of thought, they nevertheless belong just as much to a system as the collective members of the fauna of a continent—is betrayed in the end by the circumstance: how unfailingly the most diverse philosophers always fill in again a definite fundamental scheme of *possible* philosophies. Under an invisible spell they always revolve once more in the same orbit. . . . Their thinking is in fact far less a discovery than a re-recognising, a remembering, a return and a home-coming to a far-off, ancient common-household of the soul, out of which those ideas formerly grew: philosophising is so far a kind of atavism of the highest order."

Beyond Good and Evil, § 20.

Nietzsche, like any thinker, may be approached at the point of least resistance, or at the point of greatest resistance. We encounter little difficulty in reading Nietzsche, the brilliant though often repellent writer of aphorisms on cultural problems. But we find great difficulty in trying to read him as a consistent philosopher. Certainly it was not his desire to be merely a writer "in season" but to be "a first" and "a last" philosopher, in particular the philosopher of Eternal Recurrence, and thereby of Eternity.

It is true that Nietzsche was also a philosopher of his time. But his innumerable reflections on the cultural problems of our age are to be understood within the wide horizon of our twofold inheritance, the classic and the Christian tradition, both of which believed in an eternal order. As a *philosopher* of our time Nietzsche was not concerned with the time being, but was *unzeitgemäss,* out of season. In the preface to the second *Unzeitgemässe Betrachtung* on the use and abuse of history he defines his untimeliness by saying that he could not have ventured to judge the present age if he had not been a pupil of the classic age. The time in which Western man and thought originated was to him the source and standard by which he could hope to become effective in and against the present time. Toward the end of his reflections on history he goes even further, outlining the possibility of a "super-historical" standpoint from which the whole distinction between past and future loses its relevance. For if we look at the totality of being and time, every moment is equally significant. The most radical statement, however, of Nietzsche's *Unzeitgemässheit* is to

be found in his attack on Richard Wagner: "What is the first and last thing that a philosopher demands of himself? To overcome his age in himself, to become 'timeless.' With what then does the philosopher have the greatest fight? With all that in him which makes him the child of his time. Very well then! I am just as much a child of my age as Wagner, i.e., I am a decadent. The only difference is that I have recognised the fact, that I have struggled against it. The philosopher in me has struggled against it.'"[1] By this attempt to free himself from mere contemporaneousness, Nietzsche became a philosopher of his age and, one hundred years after, a worthy subject of commemoration.

In 1884, after the completion of *Zarathustra,* Nietzsche wrote in a letter from Venice: "My work has time, I do not at all want to be misjudged as though I were concerned with the particular task of the present time. Fifty years hence a few men will probably realize what I have done. For the time being it is not only difficult but (according to the laws of historical perspective) simply impossible to discuss me publicly without remaining infinitely behind the truth." "Fifty years hence" falls exactly in 1934, and at that time Nietzsche's "truth" had indeed become a matter of public discussion and worldwide significance. This truth has an exoteric and an esoteric aspect, the one called Neo-paganism,[2] and the other Eternal Recurrence.

The doctrine of Eternal Recurrence, which seems to us today the strangest if not the most absurd invention of a modern mind, was to Nietzsche himself the fundamental issue of his philosophy. Like the Christian gospel a stumbling-block to the Jews and a foolishness to the Greeks, Nietzsche's gospel of Eternal Recurrence is a stumbling-block and foolishness to those who still believe in the modern gospel of progress, which is a secularized form of Christian eschatology. Whether foolish or wise, the doctrine of Eternal Recurrence is the key to Nietzsche's philosophy and it also illuminates his historic significance, because it revives the controversy between Christianity and paganism.

Nietzsche's doctrine is a definite answer to a definite problem which can be discovered in his earliest thought. He treats it for the first time at the age of eighteen, twenty years before *Zara-*

[1] *The Case of Wagner,* Preface.

[2] See John N. Figgis, *The Will to Freedom or the Gospel of Nietzsche and the Gospel of Christ,* 309 ff.

thustra, in two papers written at college on *Fate and History* and *The Freedom of the Will and Fate.*[3] At the beginning he confesses that it will be extremely difficult to establish a standpoint from which to judge our traditional Christian interpretation of life. Such an attempt, he says, may well be the task of a lifetime, for how can we discard with impunity the authority of two thousand years? It would appear youthful frivolity to embark without a compass upon a sea of doubt in search of a new continent.[4] Why not cling to history and natural science instead of indulging in vague speculations on the Christian or non-Christian meaning of life? But we cannot avoid the fundamental question of man's significance in the totality of the world, of the meaning of human will and history within the non-human universe. For is history not very casual and contingent as compared with the eternal revolution of the heavenly bodies and its cosmic necessity? Are the events of history perhaps only the dial-plate indicating the ever-self-repeating movement of a hand which has no inner relation to the indicated events? Or is there an eternal cycle, comprising human decisions as well as natural occurrences? Can we conceive humanity as an inmost circle within the circle of cosmic fate, so that the hidden spring in "the great clock of being"[5] is humanity? To conceive, however, such a synthesis of the free will which creates history with universal fate or necessity, the philosopher would have to transcend the human-all-too-human standpoint and look at things from beyond humanity. It is the standpoint which Nietzsche eventually found in his conception of the superman Zarathustra, "six thousand feet beyond man and time." At first, however, he states the antinomy between Will and Fate. "In the freedom of the will lies the principle of emancipation and separation from the embracing totality of being, while fate reintegrates the emancipated will into it. At the same time fate evokes also the power and freedom of willing as a counter-movement to the stubbornness of necessity. Absolute freedom would transform man into a creator-God, absolute necessity into an automaton."[6]

[3] Nietzsches *Jugendschriften* (not translated), Musarion Ausgabe, I., 60 (1923).

[4] Cf. in Nietzsche's later writings the symbol of Columbus, e.g., *The Dawn of Day,* § 575; the poem *The New Columbus; The Will to Power,* § 957.

[5] See the recurrence of this metaphor in *Zarathustra,* Oscar Levy ed. (London, 1909), pp. 176 and 270; *The Joyful Wisdom,* § 341.

[6] Cf. the restatement of this antinomy in *Zarathustra,* 191 and 246.

Apparently this problem can be solved only "if free will were the highest potency of fate."

A year later Nietzsche wrote an autobiographical sketch in which he formulated once more the problem to which the will to eternal recurrence became the answer. After a short description of his Christian-Protestant background he discusses the stages by which man has outgrown everything which once sheltered him, and then he asks the question: "But where is the ring which will at last (after the dissolution of the Christian order by which man and the world had a common ground as creatures of God) encompass him? Is it the *World* or is it *God*?" Interpreted in terms of Nietzsche's mature philosophy this alternative means: is the ultimate standard and pattern of our existence the classic view of the world as an eternal cosmos, revolving in periodic cycles, or is it the Christian view of the world as a unique creation out of nothing, called forth by the omnipotence of a non-natural God? Is the ultimate being a divine cosmos recurrent like a circle in itself, or a personal God revealing himself not primarily in nature but in and to humanity under the sign of the cross?[7]

Twenty years later Nietzsche had definitely decided that it is the World which redeems our contingent existence, reintegrating the Christian ego (which "since Copernicus has fallen from the center toward an x") into the order of cosmic necessity, i.e., into the eternal recurrence of the same. The first explicit announcement of this new doctrine occurs in *The Joyful Wisdom* (§§ 341 and 342) under the title "The Heaviest Burden," and in connection with the complementary announcement of "The Death of God" (§ 343). "This life, as thou livest it now, as thou hast lived it, thou needst must live it again, and an infinite number of times; and there will be in it nothing new; but every grief and every joy, every thought and every sigh, all the infinitely great and the infinitely little in thy life must return for thee, and all this in the same sequence and the same order. And also this spider and the moonlight through the trees, and also this moment and myself." Here the idea is introduced, however, not as a metaphysical doctrine but as an ethical imperative: to live as if "the eternal hourglass of existence" will ever be turned again, in order to impress on each of our actions the weight of an inescapable responsibility.

[7] The universal and not merely ethical significance of the cross is a common topic in the writings of the founders of the church, e.g., in Justin, *Apol.* I, 55; Tertullian, *Adv. Mar.* III, 18; *Ad Nat.* I, 12.

In *Zarathustra,* where eternal recurrence is the basic inspiration of the whole work, it is not presented as an hypothesis but as a metaphysical truth. Zarathustra pretends to reveal "the highest kind of being"; in conformity with the abiding truth of being, Zarathustra is also a "plan of a new way of life." The characteristic subtitle which Nietzsche had planned for his chief work, and which he also used in the various plans for the *Will to Power,* is "Midday and Eternity." Midday is to be understood as noontide, as the supreme instant of fulfilment, the climax and crisis in which the vision of eternity becomes once and for all decisive. The experience of this eternal instant is described as an ecstatic inspiration[8] in which all being becomes speech in the most appropriate similes. Thus Zarathustra's parables are not intended as mere poetry but as a metaphysical language.[9]

In terms of the problem of time, what led Zarathustra to his crucial experience is briefly this: it is a conversion and rebirth to a new "great healthiness" out of an equally great sickness or despair, a sickness unto death. The prophet (*Wahr-sager*) of modern nihilism, whose counterpart is the prophet of eternal recurrence (for the latter is the exact reverse of the first) describes the sickness of modern man thus: "I saw a great sadness come over mankind. The best turned weary of their works. A doctrine appeared, a faith ran beside it: all is empty, all is alike, all hath been. . . . To be sure we have harvested; but why have all our fruits become rotten and brown? What was it fell last night from the evil moon? In vain was all our labor, poison hath all our wine become, the evil eye hath singed yellow our fields and hearts. Arid have we all become. . . . All our fountains have dried up, even the sea hath receded. All the ground trieth to gape, but the depth will not swallow! Alas, where is there still a sea in which one could be drowned? so soundeth our plaint across shallow marshlands!"[10] The critical time in which out of sickness great

[8] *Ecce Homo,* 101 ff.

[9] *Ecce homo,* 102 f and 108; cf. *The Twilight of the Idols,* 111; *The Genealogy of Morals,* Preface. The language of Zarathustra renews the old literary form of the didactic poem and of gnomic wisdom. Modern men believe rather in the artificial terms of natural science. But theologians and philosophers at least should appreciate the peculiar accuracy of similes and their power of indicating truth—unless they want to discard the language of Plato and of the Gospels as "unscientific."

[10] *Zarathustra,* 160 f; cf. 268.

health is born is referred to as "the highest time"[11] in the double sense of despair, when time is running out, and of blessed climax.[12] Preceding the stillness of supreme blessedness is the ghostly stillness of despair.[13] The dialectic of despair and redemption, of depth and height, of darkness and light is finally overcome in an "abyss of light" the time of which is a "standstill of time." Hence the decisive instant of noon-tide is neither short nor long but a timeless *nunc stans* or eternal. In it the despair announced by the prophet of nothingness is turned into the bliss announced by Zarathustra, the prophet of the highest kind of being. Instead of despairing that all is alike and in vain Zarathustra rejoices in the freedom from all-too-human purposes in the eternal recurrence of all things, whose time is an ever present circle, while the time of ordinary hopes and fears, of regret and expectation, is a straight line into an endless future and past.[14] The discovery of this *circulus vitiosus deus* is to Nietzsche "the way out of two thousand years of falsehood," liquidating the Christian era when man believed in a progressive history determined by an absolute beginning and end, by creation and original sin at the one end, consummation and last judgment at the other end—both eventually secularized into the modern idea of an indefinite progress from primitive backwardness to civilized progressiveness.

Over against this modern illusion resulting in "the last man,"[15] Zarathustra proclaims the eternal recurrence of life in its unmoralized fullness of creation *and* destruction, of joy *and* suffering, of good *and* evil. While he is still convalescent his animals say: "Everything goeth, everything returneth; eternally rolleth the wheel of existence. Everything dieth, everything blossometh forth again; eternally runneth the wheel of existence. Everything breaketh, everything is integrated anew; eternally buildeth itself the same house of existence. All things separate, all things again greet one another; eternally true to itself remaineth the ring of existence. Every moment beginneth existence, around every Here roll-

[11] *Ibid.*, 156.

[12] Correspondingly two opposite sounds are to be heard at that time: the cry of distress of the higher men (291 ff.), and the deep stroke of the clock at the great noontide which is also a midnight (390 ff.) in which all things become eternalized.

[13] *Zarathustra*, 225 and 175.

[14] *Ibid.*, 187 ff.

[15] *Ibid.*, 12.

eth the ball There. The middle is everywhere. Crooked is the path of eternity.'"[16] Remembering, however, his sickness unto death, Zarathustra is not yet prepared to accept the idea that even the meanest type of man will recur again and again till his animals persuade him to reconcile himself with his particular fate to proclaim this redeeming doctrine. Now he is indeed the superman, a man who has overcome himself by accepting voluntarily what cannot be otherwise, thus transforming an alien fate into his proper destiny. From now on he lives by the experience of a perfect noon-tide when "the world is perfect" and time has flown away into the well of eternity.[17] He is now a "blesser and yea-sayer." "This, however, is my blessing: to stand above everything as its own heaven, its round roof, its azure bell and eternal security. . . . For all things are baptized at the font of eternity and beyond good and evil. . . . This freedom and celestial serenity did I put like an azure bell above all things when I taught that over them and through them no 'Eternal Will' willeth.'"[18] Eventually he dedicates to the higher man his dithyramb on all Eternity.

O man! Take heed!
What saith deep midnight's voice indeed?
I slept my sleep—,
From deepest dream I've woke, and plead:—
The world is deep,
And deeper than the day could read.
Deep is its woe—,
Joy—deeper still than grief can be:
Woe saith: Hence! Go!
But joys all want eternity—,
—Want deep, profound eternity![19]

This "drunken song" repeats the two songs on eternity at the end of the third book. They express the final unqualified "Yes and Amen" to all being as such, embracing and justifying also the existence of man. By accepting with an "ultimate will"—willing backward the past as well as forward the future—eternal necessity as "the highest constellation of being," the original contradiction between free Will or history and Fate seems to be solved.

[16] *Ibid.*, 266.
[17] *Ibid.*, 336 ff.
[18] *Ibid.*, 200 f.
[19] *Ibid.*, 398.

Schild der Notwendigkeit!
Höchstes Gestirn des Seins!
das kein Wunsch erreicht,
das kein Nein befleckt,
ewiges Ja des Seins,
ewig bin ich dein Ja:
denn ich liebe dich, o Ewigkeit![20]

Zarathustra's soul is "the most fated soul which out of joy flingeth itself into chance."[21]

Not only does Eternal Recurrence answer the problem of Nietzsche's first writings; it is also the fundamental thought in his latest work. Indeed, the description of Zarathustra's "soul" is identical in structure with the "world" of Dionysos as described in the last aphorism of the Will to Power. Both represent the highest kind of being, and the last disciple of the philosopher Dionysos is also the prophet of Eternal Recurrence.[22] And just as the *Will to Power* has as its critical motive and aim the transvaluation of all Christian values (the *Antichrist* being the first book of the *Will to Power*) so Zarathustra is the most elaborate countergospel to the Christian gospel and its theological presuppositions, for the doctrine of Eternal Recurrence counteracts the doctrine of creation with all its moral consequences.[23] Dionysos as well as

[20] The English translation of *Ruhm und Ewigkeit* (part 4) is unintelligible.

[21] *Zarathustra,* 255; cf. *Ecce Homo,* on Zarathustra, § 6; *The Twilight of the Idols,* § 49; *Lieder des Prinzen Vogelfrei: An Goethe.* Accordingly Nietzsche describes also personal coincidences of his life, e.g., the completion of Zarathustra with the death of Richard Wagner, as "sublime Zufälle," manifesting sublime necessity or fate.

[22] *The Twilight of the Idols,* 120; *Ecce Homo,* 73.

[23] That Christian ethics is a consequence of Christian *faith* and thereby dependent on a definite *creed* is most evident in regard to the doctrine of creation, for the whole Christian attitude of man toward the universe, himself and his fellowmen depends indeed on the assumption that all of them are strictly "creatures." As Chr. Dawson (*Progress and Religion*) pointed out: to anyone who does not accept a theistic world-view the idea of an absolute beginning and end must be repugnant. Actually the modern scientific mind has never assimilated the Christian idea of creation. From H. Spencer and Haeckel to A. Rey (*Le Retour Éternel et la Philosophie de la Physique* [1927]), there has been a whole series of attempts to provide new scientific justification for the theory of an eternal recurrence. Nietzsche, who saw that it is hopeless to maintain the Christian standards as moral "ideals" apart from the belief in the reality of creation and consummation, opposed this faith most vigorously by restating the doctrine of eternal recurrence. In this respect he was a much better theologian than most modern Christians, who sur-

Zarathustra are essentially against Christ. Zarathustra's friends celebrate his memory in utter blasphemy by the festival of the donkey,[24] that symbol of stupidity, who repeats time and again nothing but "ye-a."

Eternity as the eternal Yea or self-affirmation of being which repeats itself in periodic cycles, remains throughout the *leitmotiv* of Nietzsche's intellectual passion. In a letter written after the onset of insanity he confesses that though he would have preferred to remain a simple professor he had no choice but to sacrifice himself as "the buffoon of the new eternities."

If there is such a thing as a "history of ideas," then the idea of eternal recurrence is an amazing example, considering Nietzsche's revival of this classic idea after two thousand years of Christian tradition.[25] Of course, the idea itself did not persist

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render all that makes Christianity substantial, consistent and attractive. Nietzsche, says J. N. Figgis, "is a standing witness that, even if you throw over the whole creed, you are no nearer to your end; you will have made ridiculous what was always hateful. That is all. . . . The very last thing that will attract is a Christianity with the supernatural left out, and all the old moral ideals intact." (*l.c.*, 305 f.).

[24] *Zarathustra,* 384 ff.; cf. *Ecce Homo,* 60. It is interesting to note that the adoration of an ass was a popular charge against the early Christians. See P. Labriolle, *La Réaction Païenne* (Paris, 1934), 193 ff. There is, however, evidence that in the middle ages an ass was indeed worshipped in memory of Mary's flight to Egypt. See G. Ch. Lichtenberg, *Vermischte Schriften* (1802), IV, 536 ff.

[25] Sporadically the idea reappeared throughout the Middle Ages in the Aristotelian theology, e.g., of Siger de Brabant, and no less a writer than Dante imagined the Trinity as three revolving circles into which the image of man had to be fitted miraculously.

> Veder voleva, come si convenne
> l'imago al cerchio, e come vi s'indova;
> ma non eran da ciò le proprie penne:
> se non che la mia mente fu percossa
> da un fulgore in che sua voglia venne.
> All'alta fantasia qui mancò possa;
> ma già volgeva il mio disiro e il *velle,*
> si come rota ch'egualmente è mossa,
> l'amor che move il sole e l'altre stelle. (XXXIII, 137 ff.)

Superseding the absolute beginning and end of the Christian drama of creation and consummation, man is finally redeemed by co-revolving with the love-inspired universe! A similar blending of the Christian and classic world-view characterizes also the Prologue to Goethe's *Faust.* In modern philosophy the idea of eternal recurrence is discussed, e.g., by Hume, Fichte, and most seriously by Schelling. Very interesting with regard to Nietzsche is O. Weininger's essay on the irreversible

and reappear like an old relic by chance excavation; rather, the historical situation became again controversial. It is contemporary Christianity which evoked in Nietzsche the revival of an idea which was basic for pagan thinking. Placed at the final stage of an evaporated Christianity, he had to search for new sources of the future, and he found them in classic paganism. The death of the Christian God made him again understand the Ancient World.[26] It is of secondary importance that he knew this world through his professional studies as a classical philologist. Many scholars were familiar with the doctrine of eternal recurrence in Heraclitus and Empedocles, Plato and Aristotle, Eudemos and the Stoics, but only Nietzsche perceived in it creative possibilities for the future, in opposition to a dying Christianity.

Nietzsche did not realize, however, that his own "contra Christianos" was an exact replica in reverse of the "contra gentiles" of the fathers of the church. Not only the doctrine of Eternal Recurrence, which was discussed by Justin, Origen and Augustine,[27] but all the general topics of Christian apologetics against pagan philosophers, recur in Nietzsche's philosophy with the standpoints interchanged.[28] For Nietzsche's philosophy, and in particular his

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character of time from the moral viewpoint over against the "immorality" of the self-containing circle and cycle.

[26] One may even question whether original Christianity did not have a similar effect on the revival of the old pagan Gods. If we can trust the paradoxical wit of G. K. Chesterton, the situation was about this: "The Gods had really died long before Christ was born. What had taken their place was simply the God of government—Divus Caesar. The pagans of the real Roman Empire were nothing if not respectable. It is said that when Christ was born the cry went through the world that Pan was dead. The truth is that when Christ was born Pan for the first time began to stir in his grave. The pagan Gods had become pure fables when Christianity gave them a new lease of life as devils."

[27] Justin, *Dialogue with Trypho* I, Introduction; Origen, *Contra Celsum* IV, 67; V, 20; *De Principiis* II, 3; Augustine, *The City of God,* XI, 4 and XII, 10–13.

[28] Cf., e.g., Nietzsche's arguments with those of Celsus and Porphyrius. Little has been added to the ancient arguments by the modern attacks on Christianity—except the Christian pathos of being "Antichrist" instead of being philosopher and cultured. To the pagan philosophers as well as to Nietzsche the Christian faith is crude and absurd. It destroys the natural harmony and rationality of the divine cosmos by an arbitrary initiative. The Christian religion is to both of them a subversive revolt of uneducated, obstinate people who have no sense for aristocratic virtues, civic obligations and ancestral traditions, because they are low, vile and ignorant. Their God is shamelessly inquisitive and all-too-human, "a God of all dark corners" and a staff for the weary. To hang on the cross means to them to

"Antichrist," is a repetition of the old complaint that Christians are *hostes humani generis,* a mean race of slaves, people of bad breeding and taste. This historical coincidence of the ancient and modern attack against Christianity indicates the lasting significance of the first and the historical importance of the second, though the first had been forgotten until Nietzsche resumed it.

On account, however, of the new historical situation which led Nietzsche to rediscover the ancient doctrine, the idea of eternal recurrence did not simply recur as the same, but was greatly and fatally changed. It was Nietzsche's noble passion to sing a new song of the "Innocence" of cyclic being and becoming—on the level, however, of a Christian "Experience." Thus *Zarathustra* it from cover to cover indeed a counter-*gospel,* a new sermon on immortality in the Kingdom of God. To the Greeks Eternal Recurrence was the manifestation of a universal rational order and beauty, to Nietzsche it is "the heaviest burden" because it conflicts with his radically modern will. To the Greeks the eternal recurrence of generation and corruption explained natural occurrences as well as historical events, to Nietzsche the acceptance of eternal recurrence requires a standpoint beyond man and time. The Greeks felt awe and reverence for fate, Nietzsche makes the superhuman effort to love it. He undoubtedly achieved the metamorphosis from the Christian "Thou shalt" to the modern "I will," but hardly the crucial transformation from the "I will" to the "I am" of the cosmic child which is "innocence and forgetfulness, a new beginning and a self-rolling wheel."[29] As a modern man Nietzsche was so hopelessly divorced from any genuine loyalty to the earth and from the feeling of eternal security under the bell of heaven that his great effort to re-marry man's destiny to cosmic fate or to "translate man back into nature" as the original text could not but be frustrated. Thus, wherever he tries to develop his doctrine rationally it breaks asunder in two irreconcilable pieces: in a presentation of eternal recurrence as an objective fact,

be divine. If the only thing which really matters is the salvation of the immortal "soul" of each individual, "why then show any public spirit, why be grateful for one's origin and one's forbears?" says Nietzsche like Celsus. Those "holy anarchists," called Christians, made it their piety to destroy the *imperium romanum* until even Teutons and other barbarians were able to become master of it. (*The Antichrist,* 130, 145, 186, 205, 221 f.)

[29] *Zarathustra,* 25 ff.

to be demonstrated by physics and mathematics, and in a quite different presentation of it as a subjective hypothesis, to be demonstrated by its ethical consequences.[30] It breaks asunder because the will to eternalize the chance fact of the modern ego does not fit into the assertion of the impersonal eternal cycle of the natural world.

Nietzsche was not so much the last disciple of the pagan God Dionysos as the first radical apostate of Christ. As such, however, he was what the "last pope" called him: "the most pious of the godless." When he created the figure of the last pope who is "out of office" after the death of God, he understood himself perfectly well, as a religious figure. Zarathustra and the pope understand each other because both are dedicated and consecrated and not profane. Toward the end of their conversation the old pope says to Zarathustra: "O Zarathustra, thou art more pious than thou believest, with such an unbelief! Some God in thee hath converted thee to thine ungodliness. . . . Nigh unto thee, though thou professest to be the ungodliest one, I feel a hale and holy odour of long benedictions: I feel glad and grieved thereby. Let me be thy guest, O Zarathustra, for a single night. Nowhere on earth shall I now feel better than with thee!"—"Amen! So shall it be, said Zarathustra with great astonishment."[31]

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[30] See the author's analysis of this two-fold presentation: *Nietzsche's Philosophie der ewigen Wiederkunft des Gleichen* (Berlin, 1935), 82 ff and 99 f. There the reader will find a more detailed discussion of the theoretical difficulties of the idea of eternal recurrence. In this paper I have tried to show the systematic place of that idea in the context of Nietzsche's philosophy and its relevance for the historical understanding of Nietzsche's antichristian position.

[31] *Zarathustra,* 319.

NIETZSCHE—AN EVALUATION

By Charles Morris

The pen becomes reluctant when it has written the words "Nietzsche" and "evaluation" on the same line. And well it might. For Nietzsche has made us acutely aware of the pervasiveness, the subtleties, the trickeries, the evasiveness of evaluation. In words which twist like the run of a snake, he has mirrored at once the complexities of his own self and the doubts, the sinuosity, the daring of the modern character. To banish him with one word, to praise him with another, to impale his variegated manifoldness on the point of another pen, becomes difficult precisely in proportion to the fullness with which he has been encountered. Hence the temptation to draw back from the difficult problem he imposes —the evaluation of his evaluations—and to approach him in some less pretentious manner. Yet a thinker who held that the basic work of the philosopher is to "solve the problem of value" and to "fix the hierarchy of values" deserves and demands to be met on his own chosen field. For Nietzsche's greatness lies in the fact that he undertook a remarkably comprehensive critique of the basic value-conflicts of Western civilization and attempted to formulate a value structure for this civilization. He thought of himself as inaugurating an epoch in human history. He writes as a prophet claiming to destroy an old world, to create a new one. No wonder the evaluating pen becomes shy.

Nietzsche held that every philosophy springs from some "heart's desire," its system of evaluations resting finally upon some imperious impulse of the philosopher in terms of which everything else is ranked, and for which every argument advanced is a weapon. To evaluate Nietzsche is then to find his supreme impulse, to see how this impulse generates a supreme value which orders his system of evaluations, and to square one's own account with this system of evaluations upon which his resulting path of life is erected. All else is but the sound and fury of uncritical praise or disapproval.

Nietzsche's own dominating and domineering impulse is dramatic. To live dramatically himself, and to use mankind as the material out of which to mold the hero of a drama for which the modern world is a stage—this is Nietzsche's secret center. And

not so secret. *The Birth of Tragedy* affirms that "art is the highest task and the proper metaphysical activity of this life," that "we have our highest dignity in our significance as works of art—for it is only as an *esthetic phenomenon* that existence and the world are eternally justified." Nietzsche was nourished on Greek tragedy, and the high achievement of such tragedy was to him its presentation of life's Dionysian forces in an ordered Apollonian form in which these forces could be envisaged and assimilated. The task of freeing the highest powers of creativity so that life itself might take on the dramatic form of a tragic work of art—such is the key to Nietzsche's whole effort and the guiding thread to all his doctrines.

But there are various possible dramas, and they vary according to the character given to the hero. The Nietzschean hero is a complex personality, possessing strong contrasts of temperamental traits (discipline, self-sufficiency, probing intellectuality, spontaneity of action, exultant emotion), weaving these opposing forces into a dynamic synthesis which is integral, intense, tragic, affirmative: "In opposition to the dwarfing and specializing of men, there is needed a reverse movement—a producing of a synthetic, justifying type of man for whom the general mechanization is a condition of existence, as a sort of ground work on which he can devise a higher form of being for himself." Such men, in building themselves, are advised to live in and through the various personality ideals which have hitherto dominated history, in order to construct upon and beyond them the more inclusive, richer, conflictful personality of the new tragic hero which Nietzsche presents under the symbol of Dionysus.

The villain of the piece is the counter ideal of man which Nietzsche sees dictated by the historical forces of this epoch: the man who renounces great goals, creative struggles, complexity of self, dangers of disintegration, long preparation, independence of judgment—in favor of conformism, self-effacement, comfort, kindness, mediocrity, peace, harmlessness, mass approval. The forces which support this kind of person ultimately stem, according to Nietzsche, from the Christian ideal of man, and are expressed in democracy, socialism, and the value-free attitude of science. And so, by the simplification which the dramatist invokes, "Dionysus or Christ" becomes the theme of the Nietzschean theatre.

The plot follows from this opposition of the main characters.

Dionysus (Zarathustra) after long discipline and maturation, pits himself against Christian man, unmasks the personal sources of his ideals, attacks the institutions through which these ideals work, announces the new doctrine of the superman as bait for the men he would gather around himself, tests himself by hardness to those who must harden themselves for the struggle, tests the quality of their affirmation of life by the doctrine of eternal recurrence, lures them by the image of gayer, bolder, lighter, hardier, harder, future men, and then, glowing like the sun, descends from the mountain to claim the thousand years of his epoch. So writes Nietzsche in *Thus Spake Zarathustra* the drama which he had looked for in Wagner and did not find; his other works are commentaries and stage directions to this his central creation.

"All is truth to me that tends to elevate man"—in these words Nietzsche has made clear the basis for his evaluations. To elevate man is to produce Dionysian men: all that favors this production is good and all that retards it is bad. Science is approved in so far as it creates a liberated, detached, refined, penetrating mentality, and opposed in so far as its stress on the intellect inhibits and restrains the other components of personality. Democratic and socialistic tendencies are accepted in so far as they provide the opposition which Dionysian man needs for his growth and the materials upon which to work his will; they are combatted in so far as they make life mechanical, uniform, monotonous, undramatic. Terms such as "slave" and "master," "weak" and "strong," "moral" and "immoral" reveal Nietzsche's evaluations of the two personality ideals which struggle for domination on his stage. His assessment of periods of history is determined by the preferential place given to one or another of these ideals. His whole metaphysics of the will to power is an attempt to design cosmic scenery for the play, and to justify his own choice of hero and villain. His intellectual doctrines and his specific approvals and condemnations are weapons in the struggle for the supremacy of Dionysian man. From this perspective there is a surprising consistency in Nietzsche's writings. Contradictions for the most part resolve themselves into different evaluations of something—say science—when various of its properties are considered, or when different phases of ideal man are being defended. It is this very consistency which is the best evidence that we have penetrated in the dramatic conception of Dionysian man to the "heart's desire" from which all of Nietzsche's doctrines and evaluations flow.

One's attitude to Nietzsche is determined primarily by one's acceptance or rejection of his ideal man. In so far as one approves of comprehensive persons, living dramatically and affirmatively in multiplicity and tension, opposing the forces which constrict life, daring to create a philosophy, an art, a religion, a culture expressive of their own nature, to that extent one is Nietzschean. Those who need a secure and stable life which primarily perpetuates the achievements of the past will find Nietzsche unsettling, arrogant, brutal, and demoralizing. But even those who are in essential agreement with Nietzsche on these matters, can justly doubt whether Nietzsche has in the symbol of Dionysus adequately incorporated the full range of character traits which claim the assent of modern man or has brought them to an adequate focus. To them the Nietzschean ideal is itself incomplete, unclear, unconvincing, easily distorted. A synthesis which is hesitant in incorporating the scientific temper, which stands too aloof from the powers of modern technology, which brushes aside too easily Oriental detachment, which has so little place for the sympathetic consideration of other types of persons than its own, and which lumps together all its modern enemies under the name of Christ is no adequate synthesis for contemporary man. To one who has understood Whitman, for instance, the wholesale opposition of Dionysus and Christ will sound crude and incomprehensible, romantic and unrealistic, neither Greek nor modern.

Nietzsche was a forerunner, and his time needed the shock therapy which he dramatically administered. But neither in his own life nor in his writings does he manage to give a focused expression to the very factors which make imperative a new synthesis. In his insanity the components operative in his personality split apart and laid themselves out for inspection: he writes letters signed as Dionysus, as Christ, as Caesar. For all his professed opposition, he did not suppress the Christ in himself, and modern comprehensive man will need to incorporate more than Dionysus or Christ or Caesar in himself. In Nietzsche's writings these components are also in unresolved war. The hero with relaxed arms seldom appears; the voice is often the clamorous, strident, hysterical voice of one who is not listened to and who demands to be heard.

The arguments which Nietzsche used to buttress his evaluations are in the nature of the case weapons in a campaign. The most

convincing are psychological and historical in character. The more strictly philosophical ones are the weakest, and today seem dated. It is hard to find in the doctrine of the will to power, for instance, a clear cognitive core which one can support or refute by evidence. The term "power" takes on so many meanings in Nietzsche's writings that no unambiguous doctrine results; if Buddha, Christ, Caesar, atoms, clouds, and the suicide are all seeking to extend their "power" the very sense for differentiation which Nietzsche characteristically insisted upon is lost. And his other main cosmological doctrine—the doctrine of eternal recurrence—is so closely connected with nineteenth-century physics (the rearrangement of bits of matter in infinite time) that Nietzsche's arguments for the doctrine are no longer compelling, even though the doctrine itself might still be defended. Yet as settings for the Nietzschean theatre the doctrines of the will to power and eternal recurrence are magnificent in dramatic design: their effect is to say that the struggle for power on the human stage is a miniature of the cosmic struggle, that the death and resurrection of the human hero is not a local episode but the pattern of all happenings, eternally necessary and eternally preserved in the events of the great circle. Nietzsche's cosmology is a dramatist's attempt to support the struggle of Dionysian with Christian man by the portrayal of a Dionysian and non-Christian universe. On his own conception of truth, this comology can have no other "truth" than this dramatic adequacy. And, by the same token, if one conceives differently the ideal of man, the cosmos will present itself with a different character. Later developments of the naturalistic current in which Nietzsche moves have not incorporated the distinctive features of his cosmology. And while later naturalists have continued his linguistic, axiological, and epistemological investigations in his own essentially biological direction, the analysis has been more careful, objective, scientific. Which is to say that we must distinguish Nietzsche's suggestions toward a critical naturalistic philosophy from his mythical and dramatic use of these suggestions as support for Dionysian man.

Psychologically, Nietzsche still has much to tell us in spite of the developments which have since taken place in dynamic psychology. The merit of his analysis is the biologically realistic way in which he deals with the actual forces at work in the human personality, forces which prevailing ideologies had largely ignored.

His work is a remarkable contribution to the psychology of individual differences, showing how different kinds of persons express ideals congenial to themselves and bend all their abilities and all cultural resources to their implementation. Here the "will to power," in the specific sense of the struggle of competing "tables of values" congenial to different persons at specific times and places, is more than a metaphor. Nietzsche's analysis in this domain has directed attention to the basic psychological cores of rival ways of life, cutting to essentials through the maze of devices by which fundamental attitudes clothe—and often disguise—themselves. But here too Nietzsche's own warfare slants and restricts his analysis. The multiplicity of fundamental values under which men have lived is oversimplified and distorted in his account, many value structures are ignored, and the treatments of the selected ones (such as the Buddhist and Christian) are at some points caricatures. It is too simple to look at man in terms of the opposition of Dionysian and Christian and to couch this opposition as that of master and slave, strong and weak. To do so is not merely to restrict unnecessarily the field of psychology, but also to blind oneself to the multiplicity of factors which are actually at work in persons and which demand incorporation in any genuinely comprehensive synthesis. Nietzsche writes psychology as a dramatist; for all his brilliant penetration his account of human nature is at best a propadeutic to an adequate dynamic psychology.

It is as diagnostician and therapist of Western civilization that Nietzsche is at his best. No one has seen so clearly that the professed ideals of this culture do not completely express the actual forces at work in the culture nor the evaluations which are actually made by its most creative members; no one has seen more vividly the dangers to a richly personal life inherent in the impersonalized, standardized, specialized, mechanized existence made possible by modern technology and industry. To demand a new table of values expressive of contemporary realities, and centering around the vision of more complete personalities, is not to write fiction but sober truth.

Nietzsche is often aware that this task at which he labored—the formulation of a modern table of values erected on a new personality type appropriate to present cultural realities—was already set by the time of the Renaissance. Each step of modern science has made it more difficult to accept literally the Christian

cosmology, and every secular achievement of post-medieval man has increased his confidence in himself and his scientifically-grounded technology. And yet modern man has not succeeded in making clear to himself what he is or wants to become. He has continued to talk in terms of personalities preferred by older cultures even when his own evaluations differed basically from these preferences. His arts, religions, and philosophies have consequently failed to do for him what at their honest best they can do; they have rationalized a past rather than clarified the present and prepared a future. So Western man has floundered in the midst of potential riches, and caught his fingers in the meshes of the impersonal machines which he designed for his liberation. Nietzsche has the signal merit of always keeping to the focus of the personal, of looking at everything in terms of the persons which it perpetuates and produces, of constantly demanding a variegated and exciting life in which neglected human resources are to be utilized. That his eye appraises life qualitatively, always with the growing human being as center, always with respect for the potentialities of human creativity, measures his significance. That his conception of the new man and the new woman is too limited, and too theatrical because too limited, but shows that Nietzsche himself was human, all-too-human; his task and his larger direction remain historically important and historically correct.

The final question to be raised about Nietzsche concerns the choice of means by which a more integral man is to be achieved. Here Nietzsche hesitates and vacillates, and is an uncertain guide. At times he gives the impression of advocating the opposition, by a new élite, of all the characteristic forces of the present. Somehow, in ways not clear, this élite is to come to power, check the tendencies to Christianity, democracy, socialism, and objective science, impose its own aristocratic order of values upon society, and use the masses as the slaves needed for its own dramatic and masterful existence. Such a tendency is connected with Nietzsche's constant reiteration that a culture requires slavery as a foundation, and his constant fear that the ascendancy of the common man is incompatible with the existence of unique and superior individuality. The connection of Nietzsche and the Nazis is too complex for resolution here, but certainly more than one Nazi has claimed Nietzsche on the grounds of the will to power, the necessity of an order of rank, the principle of the leader, the

opposition to Christianity, the condemnation of democracy, the right of the "stronger" person to use "weaker" persons as means. And Nietzsche can hardly be defended against such utilization. But in so far as the Nazis' means are advocated by Nietzsche, or are even compatible with his views, the present war is decisive: it shows both the impossibility of turning back historic forces by these methods and the unsuitability of such means to produce the kind of synthetic men Nietzsche had in mind—for certainly the Nazi leaders are not such men.

The other alternative which remains can hardly be attributed specifically to Nietzsche, but it may be the way to realize such features of his goal as remain defensible: namely, the possibility that science, technology, and social democracy might themselves be the very factors which, intelligently used, could produce a culture favorable to a great diversification of human personalities—and hence favorable to the comprehensive person, at least as one among other types of persons. Nietzsche himself does not go far in this direction, but he does make statements to the effect that the conquest of nature may give us a superabundance of energy, that democracy as a *fait accompli* must be turned to the best possible account, that the rise of the oppressed must be utilized, that the well-being of the masses is the first social requirement. Such statements, taken singly or in their totality, do not mean that Nietzsche has "turned democrat"; they do show at least a recognition of the fact that wisdom requires the utilization of the great social forces of the modern world even if the goal be the attainment and development of individuality. A scientific and technological society, with social planning as an instrument, is destined to be the pattern of the future. If Nietzsche is not a guide to such a society, he remains a warning as to what it may become, and a challenge to direct this society deliberately and resolutely to the production of diverse, multifarious, and comprehensive persons.

Nietzsche wrote that "America has no future." Certain it is that the forces of frustration, monotony, and conformism which he opposed are here strong and systematically cultivated. But Nietzsche himself had high praise for Emerson, and Whitman and Melville are testimony that the search for exuberant integral men and women, compounded out of the partial ideals of the past and cohered in chaos, has here deep roots and strong defenders. In the coming struggle to direct the resources of contemporary tech-

nology toward the freeing of levels and kinds of personality not previously possible, Nietzsche may yet play in America a significant rôle. In a society more diversified and less absolutistic than Nietzsche conceived, even more comprehensive persons than he imagined may be possible, and Nietzschean man, in the best sense and as one person among others, may find his most congenial habitat.

Mankind will not, as he expected, change its chronology to conform to Nietzsche's birth or death. It will not be fully satisfied with either Nietzsche's delineation of the man of the future or with the means suggested to nurture this man: he has not expressed our full selves nor given us a blueprint for action. To historical perspective he will appear as simply one voice through which modern man sought to clarify his longings and set his goals. But he gave himself without reservation to essential tasks and ranged himself on the side of bold and fundamental creativity. He himself saw some of his limitations and recognized himself as but a "prelude to better players." In his work, as a work of art, he did achieve his "highest dignity" and his "eternal justification." Whoever delights in contrasts, in shimmering insights, in affirmation which embraces and transcends tragedy, in strong laughter, in the unreserved devotion of the self to creative tasks, will continually return to Nietzsche to gain courage from the deed which was his life. And, in his own words, honor him as one "who seeketh to create beyond himself, and thus succumbeth."

University of Chicago.

Discussion by Kurt Riezler

It is not easy to comment briefly on these three papers, which, touching on fundamental problems of human existence, are concerned with the most paradoxical of all modern philosophers—and this at a moment when his numerous paradoxes flicker ambiguously as a rapidly moving history moves the thoughts of man.

Mr. de Huszar wants to differentiate some of our connotations of "will to power" from its meanings in Nietzsche. He is certainly right in insisting that Nietzsche's emphasis is upon "strength" and "overcoming resistance." I doubt, however, that this leads very far. Strength too is a rather broad term. It seems to me that Nietzsche, with one hand, sets up the "will to power" as the ultimate measure of good and bad; and with the other assesses this same will to power by other measures of moral and esthetic evaluation, thereby "measuring" his measure. This may be one of his paradoxes. There are different ways of removing this contradiction and arriving at an apparent consistency. Yet the critic of literary style, applying to Nietzsche the hidden standards of criticism, of which Nietzsche himself is a past master, will make no such attempt: he will discern that Nietzsche, applying the two measures, speaks in two voices.

The voice of the Nietzsche who proclaims the will to power as the fundamental drive and measure of good and bad is high-pitched, strident, strained—we sense a certain convulsive effort, a cramp in his style. The tone of the Nietzsche who within this will to power analyzes and differentiates, is different: here he molds the German language to serve a gentle and natural voice as an instrument of expression; here is one of the greatest writers who has ever written in German—of extreme sensitivity, delicacy, richness, and vivacity. Now and then the two voices seem to blend—we sense an enormous inner tension, sometimes still admirable, sometimes painful. Toward the end of his conscious life the cleavage becomes more and more manifest—in his first voice he violates those subtle standards of good taste and human attitudes his second voice was so eloquent in establishing.

Mr. de Huszar quotes Nietzsche's distinction between those philosophers who philosophize out of their defects and those who philosophize out of their riches. I think Nietzsche said "the riches of their gratitude." We might apply this distinction to Nietzsche

himself and his two voices. Speaking in the first voice, he philosophizes out of his defects; in the second, out of his riches. However, his defects and his riches both spring from one source: his extreme gentleness, sensitivity, vulnerability. His description of his father, who died young, holds good for himself. He too was hardly fit to live, and certainly not at all "to become hard." Thus in the one voice he protects himself against his own sensitiveness, whose riches he unfolds; in the other, tension pervades his writing; the two voices become part of his style, the corresponding two yardsticks, part of his thought.

Finding myself in general agreement with Mr. Morris, I put a question mark after only one point. Mr. Morris is right: Nietzsche cannot serve as guide to a modern "comprehensive man," whatever kind of man that is. Though Nietzsche's "Dionysian" man seems to me a little broader, and reaches far into what Mr. Morris calls the Apollonian and Promethean way—Nietzsche did not want—he would even hate—to serve as such a guide. His will to destruction would probably encompass this "comprehensive" modern man. We should not underestimate the thoroughness of this will to destruction of the modern world and the modern man.

To analyze this will, we must distinguish between a personal will and the conviction that this modern world of ours is going to destroy itself—Nietzsche would probably tell us that we are still in the initial phase of this process of self-destruction. In 1880—in the midst of a complacent world society which was still perfectly sure of itself—he sees civilization moving toward a catastrophe. He predicts "wars as there have never been wars on earth." Yet the "will to destruction" does not merely accept and bow to something we now call a "trend," and eagerly comply with. Nietzsche wills it—and not merely because it is a "trend"; when we ask and search for reasons we find another of his paradoxes—these reasons are moral, even religious. The moralist demands that history, the world, even God be "justified"—*gerechtfertigt werde.* The modern world cannot be "justified." The word recurs perpetually throughout his writings; the demand for justification guides his thinking. Even when—*das Land der Griechen mit der Seele suchend,* as Goethe says—he turns to the Greeks—he craves justification. This demand is a religious impulse, profoundly Christian, totally un-Greek.

With your permission, I should like to insert a few remarks concerning the relation of Nietzsche to the Greeks, and in due course turn to the doctrine of eternal recurrence, of which Mr. Löwith has given us such a penetrating analysis.

Nietzsche, in searching for justification, asks the Greeks an un-Greek question. The Greeks, at least before what Nietzsche calls their "decadence," did not ask that question, and therefore give no answer to it. Their answer is implied in their silence. Nietzsche senses that answer, but never makes it his own. It is a simple answer. It is that the question is wrong. The Greeks never felt that the world, history, nature, or the eternal images they called "Gods" demand or need justification. Nor did any of the later men who came nearest the Greeks. Goethe did not. Nor did Shakespeare, even in his deepest melancholy. Nature needs no justification. She is. They accepted the way of things—with a reverence and humility that, though humility is a Christian virtue, no Christian ever succeeded in learning from the Greeks, as the Christian doctrine of man's place in creation bars such humility. If the Greeks had ever talked in terms of justification, they would probably have advised the eager justifier of God to justify himself—as far as he could in elated moments of action, knowledge, and gratitude—by the beauty of the songs he sings or the excellence of the laws he gives or whenever a ray of sun, as Pindar says, glints over the crest of the waves in that dark sea which is the life of man. An attempt to justify the Gods is but arrogance in mortal man. Nietzsche, profoundly modern, was not naïve enough ever to be a pagan. Yet he knew more about the Greeks than anyone else, and it may even be that his knowledge —a knowledge by longing and desire—would have been less eloquent had he been naïve.

I am grateful for learning from Mr. Löwith that the Christian Fathers also treated the doctrine of eternal recurrence as the pagan counterpart to the Christian God-created cosmos. Mr. Löwith alludes to the difference between Nietzsche's notion of this eternal recurrence and that of the pagans. Though the difference seems negligible when we confront both notions with the Christian cosmos, the story it tells is important enough, and illustrates Nietzsche's relation to the Greeks. The ancient cyclical notion of time, originally an humble acceptance of the cycle of birth and death, transferred to cosmic periods, is as natural and naïve as

Nietzsche's eternal recurrence is artificial—derived as it is from a dubious play with infinity and the specific causality of modern classical physics. No Greek ever adhered to the infinite repetition of every fact and event to the last detail, and would hardly have seen any reason to do so, as Nature and her ways remain the same in all their eternally mutable manifestations. I do not think the Greeks ever demanded that man "love" his fate. I think I am not mistaken in sensing here again the lack of naïveté, the convulsive effort—as an expression of the craving for and despair of justifying what neither can nor need be justified. An attitude alien to the Greek mind, and implicitly warned against by Apollo himself, whose "know thyself," carved on his temple at Delphi from time immemorial, has none of its later connotations, but simply tells man to respect the boundaries set mortal man.

Nietzsche says somewhere that philosophy is the talk of the very great from peak to peak across the centuries and over the valleys in which the many dwell—and among the many he included, of course, us, the professors of philosophy. If we accept this notion of a history of philosophy outside history and ask whether Nietzsche's own voice will be heard in this peak-to-peak discourse, we might dare answer both No and Yes. No, so far as he shouts in a high-pitched voice his magic words—superman, blond beast, the death of God, eternal recurrence; to be misused by a mass society he despises—that means all the things current discussion in the valleys of our own age considers the core of his tale. They belong to a particular historical situation, and will not be listened to in any talk across the centuries. We might answer Yes, so far as the richness of his delicate soul speaks in a gentle voice, embracing the entire scale of man's utmost misery and deepest happiness. Here he is one of the greatest knowers of man—the most fearless of inquirers into the queer logic of the human heart, both individual and social—and this voice may still be heard in a time when the modern man of the 19th and 20th centuries, and the plight of the Christian of an evaporated Christianity, has been forgotten.

If, however, we repudiate such an ahistorical notion of the history of philosophy—and those of us who are believers in history will repudiate it—and confront Nietzsche with the present historical moment, we can do it in one of two ways, and should do it in both: telling him what in the present moment we have to say to him and asking him what he would say to us. We might show

him the picture of the European Continent, his transnational home —the type of men who have exploited the power of the magic words he coined—*das missrathene Tier* parading as *das wohlgeratene Tier*—the subhuman parody of the superman, who combined in himself what Nietzsche deemed man's three greatest stupidities: nationalism, antisemitism, and Wagner's romantic swindle. We would have a great deal to say. But he too might have something to say: the mass society enmeshed in the sinister necessities of the industrial age, its citizen—the night of blindness descending, Science writ larger and larger, yet man's knowledge of man rapidly shrinking, the "last man" seeking nothing more than the petty happiness of his security, moving toward the subhuman model of a man who is the mere manipulated robot of conditioned responses in basic English—with no one knowing who will and should be the future human, subhuman, or superhuman manipulators of manipulated man. Both we and Nietzsche will have a great deal more to say—things embarrassing to both him and us.

If this is the ironic paradox of this centenary, this discussion, dealing with this paradox, is to both his and our credit. We would hardly discuss it if he were his parody or we already his "last man."

New School for Social Research.

Discussion by James Gutmann

No answerer I . . .

Meanwhile the winds, and rains,
And Earth's old glooms and pains
Are still the same, and Life and Death are neighbours nigh.

These words of Thomas Hardy's suggest in their Nietzschean challenge a certain appropriateness for the commemoration of Nietzsche's centenary by a Conference on Methods in Philosophy. Hardy's lines lack Nietzsche's sense of Earth's glories, vivid alongside its pains. And we cannot say of Nietzsche without restriction what Hardy said of himself, that he is "no answerer." But Nietzsche's questions and the methods which he applied to them remain significant even for those who reject his answers. His answers are themselves by no means always definite and precise, which seems to indicate that Nietzsche regarded other aspects of his work as more important.

If asking questions has always been the chief business of philosophers since the time of Socrates, the questions which modern science has forced upon modern philosophy are at least as significant as are those inquiries which the special sciences have preempted and withdrawn from the philosophic domain. Because I am convinced that Nietzsche's questions continue to be of primary importance today, I have ventured to consider some of the factors in terms of which he formulated them and attempted their solution. My suggestions regarding Nietzsche's methods are obviously incomplete, mere indications of some aspects of his procedure which especially impress me when I read his books. But the elements of Nietzschean methodology which I have selected seem to me worthy of careful consideration.

Though we may well understand the "shyness" with which Mr. Morris approaches the problem of "evaluating Nietzsche's evaluations," we must surely be grateful to him for undertaking the difficult task of ascertaining "Nietzsche's supreme impulse." It is, however, by no means certain that a Nietzschean is indeed one who "approves of comprehensive persons, living dramatically and affirmatively in multiplicity and tension, opposing the forces which constrict life, daring to create a philosophy, an art, a religion, a culture expressive of their own nature." In a sense everyone gives a measure of approval to the Nietzschean ideal

expressed in these persuasive terms. But this measured assent might have roused the scorn of Nietzsche himself. It seems to me questionable whether he himself could be called a Nietzschean in these, or perhaps in any, terms. Be that as it may, he would indubitably have approved the absence of sectarianism if not of discipleship from this commemorative discussion.

If assent to a single ideal is not to be presupposed, neither is acceptance of Nietzsche's choice of means for attaining his purposes. Mr. Morris insists that Nietzsche is an "uncertain guide" in this respect, "hesitant and vacillating." A defender of Nietzsche might counter that Nietzsche fails to offer a blueprint or program for attaining his ideals precisely because no one who needs that kind of guidance could envisage his objectives. Without having this capacity himself he could hardly be even a girder in the bridge leading from man as he is to man who is to be more-than-man—any translation of *Übermensch* seems preferable to "Superman" since the comic strips have pre-empted that term. *Übermensch* has more than a prefix in common with Emerson's *Oversoul.*

It is not my intention to pose as a champion of Nietzsche, either as regards his ideals or with respect to his program—if one could be found. Rather, I should like to ask whether it is not possible to learn from Nietzsche in a way other than that defined by the previous papers. Without attempting anything like a complete answer to the question, I should like to ask what one can learn from Nietzsche by giving serious attention to his intellectual and philosophic methods.

An emphasis on Nietzsche's methods is surely appropriate in a meeting held under the auspices of this Conference. It may even be that this approach will suggest solutions for some other questions concerning Nietzsche's thought, such as the problem of the relative importance, in the formulation of his doctrine of eternal recurrence, of arguments drawn from the work of nineteenth-century physicists and of those drawn directly from his own moral and aesthetic experience.

What, then, are at least some of the most important elements in Nietzsche's method? The first aspect to emphasize is, I suppose, the obvious one that Nietzsche's method is the opposite, as he constantly insists, of those traditional procedures of conventional, academic speculation for which he has nothing but contempt. Mr.

de Huszar has pointed out that Nietzsche combats these philosophies, as he opposes comparable tendencies in religion, morals and art, and that he treats them "not as errors but as forms of disease." "In contrast to all forms of decadence," to quote Mr. de Huszar again, "Nietzsche proclaims the 'pessimism of strength' which says 'Yea' to life in spite of all its terrors and pains." But it is important to remember that in contrast to the facile Yea-sayings of many so-called disciples of Nietzsche, he himself insisted that Zarathustra's "Yea" must be carefully distinguished from the "Ye-a" which the donkey utters without further content, however much the two may sound alike.

The affirmation of life is, indeed, an essential part of Nietzsche's method. He opposed not only the easy optimism of idealists and the narrow vision of utilitarians, but also the pessimism of the Schopenhauerians. This was due in large measure to his conviction that their methods of thinking excluded some of the most important values of experience. Their "truths" were therefore less significant for life than the "falsehoods" of poets, dramatists and musicians whose methods he sought to introduce into his own philosophy.

Fundamental to that artistic insight, and to Nietzsche's own method, as Mr. Morris's discussion makes clear, is his recognition of the significance of individual differences. He is keenly aware that "different kinds of persons express ideals congenial to themselves and bend all their abilities and all cultural resources to their implementation." This suggests an amplification of Mr. Morris's conception that a Nietzschean is one who accepts Nietzsche's ideal. For the pluralism of Nietzsche's ethical ideal seems as important as his relativism, though the latter is more frequently mentioned.

Mr. Morris himself emphasizes the inadequacy of the Nietzschean Dionysus symbol, and shows that it fails to express the "full range of character traits" which a complete conception of human nature should embody. Yet nowhere does Nietzsche assert that the Dionysian type exhausts the possibilities of man's spiritual fulfillment. He esteems Apollonian elements, and even recognizes that certain qualities of Jesus of Nazareth exemplify spiritual values. That these and other attributes can all exist in a single man is not to be assumed; the implication is rather that in Nietzsche's house there are many masters—or many types of masterly personality.

That despite his self-identification with Anti-Christ Nietzsche was drawn to the Christ-ideal, is sometimes asserted on the dubious basis of letters written after his collapse. How much clearer is the evidence provided by the title, *Ecce Homo,* and other self-revelations in that moving tragi-comedy!

In recognizing the importance of individual differences, Nietzsche is in accord with the romantic movement he himself often criticized on other grounds. It is impossible for me to understand Mr. de Huszar's assertion that Nietzsche's "glorification of individual consciousness and self-will" ranged him "in absolute contrast to the romantics." Schopenhauer, Kierkegaard and Dostoievski surely have no monopoly of romantic vision. If they denied individual consciousness, Byron, Schelling and Stendhal, all good "romanticists," argued with fully as much authority that he who struggled to realize his own most ample self-consciousness would thereby realize the fullest meaning of life. Nietzsche's special admiration for Stendhal, I think, is significant in this connection, and is noteworthy in view of the Stendhalian paradox to which Mr. de Huszar calls attention.

Another element in Nietzsche's method closely linked to his psychological pluralism not only places him in the line of the nineteenth-century romantics, but also suggests his relation to all those later schools of psychology which recognize that it is not the surface factors of human rationality but the subconscious elements of motivation which largely determine our thought and action. It is in this sense that Nietzsche held that "psychology is once more the path to the fundamental problems," and it is in the awareness which he derived from this insight that he anticipated many of the findings of modern dynamic psychology. Part of the hostility which both Freud and Nietzsche encounter is the bitter-sweet tribute accorded to the critic who casts light on our self-flattering theories of conduct.

Nietzsche cannot claim the laurels of the great philosophic systematizers; he lacked interest in founding a school or developing a system. But there is more consistency in his writings than is sometimes granted, as Mr. Löwith indicates in his discussion of the doctrine of eternal recurrence. This theory provided the answer to "the problem of Nietzsche's first writings," and constitutes the "fundamental thought of his latest work." Whatever its relation to nineteenth-century physics, it offered a challenge

to human nature not only to accept the universe but to say to it: *Aria da capo.* So, too, whatever the doubts with which contemporary physics confronts the doctrine, it is, as Mr. Löwith makes clear, a criticism of the Christian doctrine of creation and of the Liberal doctrine of progress, which is as pertinent today as when Nietzsche first discovered it in his moment of revelation, that noontide in which he achieved his vision of eternity. In so far as the task of philosophy combines vision and criticism, the importance of Nietzsche's critical method is clearly paramount. And Nietzsche's method, applied to his fundamental problems—and to questions which he did not ask—has value even when we do not accept or, indeed, know his answers.

Columbia University.

Discussion by Walter Eckstein

The attempt to outline Nietzsche's philosophy is always dangerous. To speak in his own language, it is like stepping upon the head of a serpent. Nietzsche himself wanted nothing more than that some one should at some time give an objective exposition of his philosophy, and yet he dreaded nothing more than that his thoughts should be forced into the Procrustes-bed of a system. But every attempt to expound a philosophic theory is necessarily an attempt to reduce it to a more or less consistent system.

For that reason I think it a very happy idea to dramatize Nietzsche's philosophy as Mr. Morris has done, and so to remain true to the intrinsic ambivalence of Nietzsche's thought. Also, as Mr. Morris points out, Nietzsche always prefers an *aesthetic* interpretation of the world—like most thinkers who try to give up any *moral* interpretation. It is no accident that Nietzsche likes to quote Heraclitus' famous saying: "The world is nothing but a child at play."

On the other hand, when Mr. Morris considers *Thus Spake Zarathustra* Nietzsche's *central* creation, and all his other works commentaries and stage directions to it, he sides with those Nietzsche interpreters who see in Nietzsche primarily the poet, the artist. There is of course enough in Nietzsche to justify such an interpretation. He himself wrote to Overbeck that it had been his practical aim to become an artist (creator), a saint (lover), and a philosopher (knower) in one person. And he wrote to Brandes: "We philosophers like nothing better than to be taken for artists." And yet the emphasis in such statements is upon "we philosophers." But we have to remind ourselves what Nietzsche's idea of a philosopher was. To him the philosopher was diametrically opposed to the *scholar*. To him "the real philosophers are commanders and law-givers; they say: 'Thus shall it be,' they determine the 'whereto' and 'what for' for man." What he objects to in scholars is that their thinking is slow and a sort of laboring; "they take things too seriously and too heavily" (*Beyond Good and Evil*).

Perhaps we should ask ourselves if we too have not taken Nietzsche too seriously and too heavily. Consider his doctrine of "eternal recurrence," whose meaning and importance within his philosophy Mr. Löwith has so clearly expounded in his paper.

This idea, naturally a stumbling-block and foolishness to modern man, was really that last daring consequence of his war against Christianity and what he considered the Christian idea of history. But did Nietzsche really *believe* in it? Was it enough for him to consider the idea of eternal recurrence the right antidote against Christianity and the logical outcome of "the Eternal Yea or self-affirmation of Being" (to use Mr. Löwith's expression) to make this old-new idea not only acceptable, but the object of a new creed? Or did the alleged proofs from modern physics really help to establish the basis for a scientific theory? In one of his posthumously published notes Nietzsche wrote: "Perhaps it is not true—let others wrestle with it." Mr. Löwith, in his book *Nietzsches Philosophie der Ewigen Wiederkunft des Gleichen,* admits that Nietzsche's metaphysics remained a "Graecizing phantom," because with him it had no vital foundation, as it had with the Greeks. Mr. Löwith also admits that this attempt to revitalize antiquity has failed.

Nietzsche's favorite simile for philosophy is "dancing"—to him it is something light, weightless, divine, a daring adventure. In this sense, whenever he speaks of heroism, isn't he thinking in the first place of *intellectual* heroism?—The heroism of the thinker who is willing to give up his most beloved illusions and who, like the knight in Duerer's picture, rides between death and devil?

It is true that more than one Nazi has claimed Nietzsche for his own, on the ground of his will to power, his plea for a new order of rank, his condemnation of democracy. But have they been justified in doing so? Incidentally Baeumler, the official Nazi philosopher, admits that at the beginning no National Socialist ever thought of connecting the movement with Nietzsche. It is true that Mussolini called himself a disciple of Nietzsche, and that he made one of Nietzsche's sayings his motto: "Live dangerously." However, if you look up the passage in the *Joyful Science* you will find that it is addressed "*An die Erkennenden,*" "to the thinkers." How often does Nietzsche, particularly in *Beyond Good and Evil,* speak of *intellectual* cruelty, of cruelty of knowledge, and does he not call the philosopher's will to truth *his* will to power? The ultimate question to put to a philosopher would be: how much truth can he endure, how much truth does he dare?

It seems that not only have we taken Nietzsche too seriously and heavily, but sometimes—and this was an even greater mistake

—also too literally. Nietzsche seems easy to read. When he found his first readers, they saw in him the *Bohémien,* the immoralist who turned the tables upon all morality. They took the immoralist literally. Today his new Nazi and Fascist friends commit a similar mistake: they take his praise of power and cruelty literally, and they again find Nietzsche's work easy reading, simply because they too remain on its surface. And yet Nietzsche had always been afraid of readers who, "with clumsy fingers, reach for his books without being entitled to do so."

One Nazi author recently asserted that only a National Socialist can fully understand Nietzsche. And another writer from the same camp comes to this conclusion: "In accordance with Nietzsche's ideas, today the merely spiritual has been overcome, and the powers of the earth and of life, the powers of blood, of race, of will and historic deed-effect have been reinstated in their birthright. The heroic man whom Nietzsche presaged and announced is already marching over the German soil in batallions full of discipline and determination."

It is true that Nietzsche welcomed the warrior type as a stepping stone towards the higher man of the future. But, as has been said before in this discussion, Nietzsche would have had nothing in common with the new gospel of brutality and hatred. The "great healthiness" of which he speaks is not identical with mere physical strength and brute force. At bottom, for him the spiritual or intellectual man is also the highest and the strongest.

Power, as Professor Huszar has well emphasized, meant to Nietzsche something intrinsic in man, something perhaps not so far from Spinoza's ideal of the free man who is also the strongest, because in him the highest activity of man, knowing, has reached its peak.

Therefore perhaps it is not quite correct to say that Nietzsche is not interested in truth, morals and philosophy as such. Is it not rather the case that the search for the meaning of life and the thirst for truth can be called the two basic impulses in his philosophy and his life? In his *Gaya Scienza* he says in this spirit, revealing again that ambivalence of his thinking: "Passion for knowledge with us has become so strong that we can no longer appreciate happiness without knowledge—not even the happiness of a strong and fixed illusion."

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NIETZSCHE AND THE BOURGEOIS SPIRIT

Comment by Paul Tillich

None of the three papers on Nietzsche printed above deals directly with Nietzsche as the critic of bourgeois society, though each of them points to his criticism as one element in his whole philosophical attitude. It is indeed impossible to neglect this element in Nietzsche's work; explicitly or implicitly it permeates every part. Even his sense of being "out of season" (*unzeitgemäss*) is primarily a way of expressing his negation of *his own* time. It cannot be interpreted, as Mr. Löwith seems to do, as an abstract timelessness. It makes, of course, a supratemporal claim, like every truth; but it is essentially related to the particular age he is trying to overcome in himself. If he calls this age "decadent," this implies a definite interpretation of history, in which his own appearance—the appearance of "Zarathustra" before the "great midday"—has a definite place. This sense of having a prophetic mandate, of standing at the most crucial moment of history, cannot be left out of the picture.

In expressing the eternal weight of every moment of time in terms of the doctrine of "Eternal Recurrence," Nietzsche is using a classical idea which contradicts his consciousness of the "fullness of time"—just as his ecstatic love of fate contradicts the classical resignation to fate—*cf.* Löwith. This is the reason why his philosophy reveals a dominating dramatic impulse, as Morris brings out. But this dramatic form is no mere aesthetic preference of Nietzsche's; it is not due to the fact that "Nietzsche was nourished on Greek tragedy," as Morris remarks. It is rather his feeling for the dramatic moment in world history in which "man" has come to an end and a being "beyond man" is beginning to appear. The decadence to which Nietzsche opposes his "will to power" is not decadence in general, as Huszar seems to indicate. It is *the* great decadence in which humanity reaches the stage of the "last man," who is a completely rationalized cog in a machine without creative vitality; and in which it reaches at the same time the beginning of the stage "beyond man," the stage of a higher life, embodied in more exalted, more powerful and more creative beings.

It is in the light of this "eschatological consciousness" that we

must understand Nietzsche's attack on bourgeois society. Since "life" is the divine-demonic symbol which takes the place for him of the idea of God, whatever is opposed to "life" he challenges with a prophetic wrath. And since the greatest obstacle to "life" is the "objectivating" nature of bourgeois thinking and acting, he wages war against bourgeois society in the name of his ultimate principle, creative life.

There were other attacks on the bourgeois system as it developed after the middle of the nineteenth century. Marx challenged the dehumanization of an economic order in which man is estranged from himself, from society and the world, and is transformed into a commodity, a "thing," a mere object. Kierkegaard challenged the logical necessity of "reason," in Hegel's sense, which destroys man's real existence, his ability to decide and his living in passion and faith. Stirner preached the absolute individual. Dostoievski revealed the demonic forces underneath man's rationality, Jacob Burckhardt prophesied the catastrophe of mass culture. And at the beginning of the twentieth century the creative men in the arts, poetry and philosophy were aware of the approaching earthquake in Western civilization.

We cannot consider Nietzsche apart from this world-historical frame. In his writings there are analogies to some of the ideas of all these men. Like Marx, he describes the development of mankind into a monstrous machine, to serve which has become the only meaning in life. Like Kierkegaard, he defends "becoming" against knowledge and demands a non-detached and passionate attitude towards truth, especially towards historical truth. Like Stirner, he proclaims the value of the strong Ego as over against its dissolution into conventional behavior and moralistic or sentimental self-surrender. Like Dostoievski, he looks into the dangerous forces in the depths of man which control his rational action. Like Burckhardt, he foresees the self-destruction of Europe. And he has influenced most of the critics of bourgeois society and most of the prophets of doom during the beginning of the twentieth century.

Nietzsche shared the fate of many of the great fighters against "objectivation" during the nineteenth century: he fell into a subjectivity the passionate maintenance of which betrayed its own inner insecurity. The paradoxical character of his oracles, the predominance of aggression, his unconquerable hatred for enemies

who represent elements of himself, the mannerism of his style: all this reveals the desperate situation of those who were fighting against a foe they were not able to conquer even within themselves. This foe was the world created by the victorious bourgeoisie, the world in which means replaced ends, and everything, man included, had become an object of analysis and control. But it was just analysis and control that Nietzsche applied in his attempt to overcome the world based on them. The tragic implications of this contradiction have become manifest today in the anti-bourgeois revolutions of the twentieth century, one of which, Fascism, has wrongly *and* rightly been linked to Nietzsche's philosophy.

No interpretation of Nietzsche should neglect his grand and tragic war against the spirit of his age, the spirit of bourgeois society. As it does not lessen the proportions of Socrates to emphasize his struggle against the spirit of his age, the spirit of sophistic disintegration, so Nietzsche's stature is not diminished by a strong emphasis on the spirit he was fighting against in his day. The more deeply a man is rooted in the Kairos (the creative moment of time) the better is he able to reach the Logos (universal truth). Nietzsche was great because he struggled against his times out of the deepest experience of his times.

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FRIEDRICH NIETZSCHE IN THE JUDGMENT OF POSTERITY*

By Walter Eckstein

There is hardly another thinker whose posthumous career has been so eventful and changing as Friedrich Nietzsche's. What Schiller said of Wallenstein, that "his memory, distorted by partisan love and hate, remains unstable throughout history," could be said with equal truth of Nietzsche. To be sure, Spinoza's philosophy has suffered a similar fate. For a whole century after his death Spinoza was treated, to use Lessing's famous phrase, like a dead dog, and it was only with the Spinoza Renaissance towards the end of the eighteenth century that the great change in the evaluation of his thought came about. Nietzsche's work has fared somewhat differently. It has not only been subject to such a change in evaluation, but has also been—and still is—understood and interpreted by different men in very different ways.

Of course, the reasons for this are obvious, and are to a great extent to be found in Nietzsche's own writings. His employment of the literary form of the aphorism is clearly one of the sources of the almost unlimited variety of interpretations. The aphorism invites paradoxical statements; in its very essence it is the vehicle for a sudden inspiration, a thought that flashes through the mind like a meteor, only to be followed by another quite different or even contradictory inspiration. The aphorism, and particularly Nietzsche's way of using it, lends itself to exaggeration, to overstatement, to abrupt and startling attacks upon traditional and generally accepted ways of thinking. And it is naturally easy enough for any disciple or follower to use this or that dictum of the master and to build his own interpretation upon the mosaic of such *disjecta membra*. If Nietzsche knew some of the recent Nietzsche interpretations, he would be reminded of his admired Greek predecessor Herakleitos, whose aphoristic sayings must have played a similar rôle in later Greek philosophy. Plato in the *Theaetetus* scorns those strange Heracliteans who always carry around a bundle of the dark and ambiguous aphorisms of their master in their quiver like arrows, and shoot them at you whenever opportunity offers, before you are prepared for what is going to happen.

* An address delivered at Columbia University in commemoration of Nietzsche's centenary.

However, it is not so much this literary form which is responsible for the variety of interpretations, nor is it Nietzsche's frequent change of opinion, of which he himself was quite aware, and which he praised as the true sign of the real thinker when he exclaimed: "Only he who sheds his skin is akin to me." It is rather the ambiguity of his language, the "mask" of which he himself occasionally speaks, the rôle which he plays, the "incognito" which he assumes. It is not only the *Zarathustra,* which Nietzsche himself characterized as a work of poetry, that is clothed in the mystical-poetical language of parable and simile. It sounds almost prophetic when Nietzsche says: "My writings are very well protected. Whoever reaches for them, and in so doing transgresses his bounds, as one who has no right to such books, immediately makes himself ridiculous; a small attack of rage forces him to pour out what is innermost and most ridiculous in himself, and who could not tell what would come forth in such a case?" In one of his early writings, *Philosophie im tragischen Zeitalter der Griechen,* Nietzsche rejects as absurd the idea that any philosopher should intentionally, as Herakleitos is said to have done, use unclear language, "unless at bottom he has to conceal certain of his ideas, or unless he should be rascal enough to hide his lack of ideas behind empty words." Today Nietzsche will hardly be accused of using empty words.

No one, however, can acquit Nietzsche of that "obscurity"—though perhaps not unclarity—which has always been attributed to Herakleitos. This obscurity of his language may be due in part to the intrinsic difficulty of expressing new ideas in old words. Nietzsche was well aware of the fact that this constituted one of the main sources of misinterpretation. He knew that "with the same words people mean, feel, scent, wish, different things," and he complains of "the inability to see the new and original," of the "clumsy fingers that do not know how to grasp a *nuance,* the stiff seriousness that stumbles and falls over a word, the shortsightedness which, confronting a vast stretch of land, sinks into blindness." And it reads like an anticipation of certain present-day German interpretations, when he adds that a soul's true nature is revealed by the particular group of ideas that are in its foreground and are therefore the first to be excited.

At times, however, one cannot help thinking that this obscurity is at least partly intentional. Certain of his formulations seem

not only to admit, but in some cases even to provoke superficial and literal misinterpretation. This is hardly to be explained as what Nietzsche calls his protecting mask, because at times the ambiguity of expression might be expected to evoke connotations far more startling and revolutionary than the real meaning.

However this may be, no one could possibly deny the existence of this obscurity and ambiguity. It accounts for the vast range of different and contradictory interpretations given Nietzsche's work, and makes it so hard to grasp his real meaning. George Allen Morgan, in his excellent book *What Nietzsche Means,* points out how difficult it is "to capture the whole of his elusive essence." Karl Jaspers exclaims in similar vein: "When we think we have grasped Nietzsche, he turns out to be not this, but something else. But this 'something else' seems always to drift away and to escape. It is a part of his nature that he is apt to be mistaken for somebody else."

If we try to review the almost endless variety of interpretations and misinterpretations of Nietzsche,[1] we are startled by the change that has occurred in the appreciation of his personality and his work. In his own lifetime Nietzsche's reputation was established by his *Unzeitgemässe Betrachtungen.* They won him a great number of admirers and adversaries, though he was then considered usually as an essayist, or as an author of *belles lettres.* The Nietzsche of the *Zarathustra* and of *Beyond Good and Evil,* however, remained practically unknown. This situation changes entirely in the nineties. Now a new and somewhat unsound interest in Nietzsche begins to awake. Some of his expressions, such as "beyond good and evil," "*Uebermensch,*" the "*blonde Bestie,*" become popular catchwords, frequently quoted though only half understood. The broader public begins to take Nietzsche as the

[1] Of those studies which deal explicitly with the literature on Nietzsche may be mentioned: Friedrich Würzbach, "Nietzsche; Ein Gesamtüberblick über die bisherige Nietzsche-Literatur," in *Literarische Berichte aus dem Gebiete der Philosophie,* Heft 19/20 (1929) and Heft 26 (1932). Gisela Deesz, *Die Entwicklung des Nietzsche-Bildes in Deutschland* (Würzburg, 1933). Gertrud v. Petzold, "Nietzsche in Englisch-Amerikanischer Beurteilung bis zum Ausgang des Weltkrieges," *Anglia, Zeitschrift für englische Philologie,* LIII (1929). Paul Hultsch, "Das Denken Nietzsches in seiner Bedeutung für England," *Germanisch-Romanische Monatsschrift,* XXVI (1938). Geneviève Bianquis, *Nietzsche en France. L'influence de Nietzsche sur la pensée Française* (Paris, 1929). Julius Wilhelm, *Nietzsche und der französische Geist* (Hamburg, 1939).

apostle of unrestricted licentiousness, of free love, of ruthless egotism and of a libertine enjoyment of life. His influence upon literature, particularly upon poetry, begins to grow, and Stefan George and his circle take their inspiration from him.

The philosophic literature of the period, with the single exception of George Brandes' *Aristocratic Radicalism,* published in 1889 and based on lectures given in Copenhagen, represents an utterly negative attitude towards Nietzsche. Nietzsche was almost unanimously held a dangerous author. In his own lifetime this mark had already been fixed upon him. In November 1886 he wrote to his sister: "My latest book [apparently *Beyond Good and Evil*] was greeted in one Basel newspaper in the following way: 'Those trucks that shipped the dynamite necessary for the construction of the railroad over the St. Gotthard carried a black flag of warning, indicating deadly danger; in this sense we call the book of the philosopher Nietzsche a dangerous book.'" It was perhaps this remark in the Swiss newspaper which later led to Nietzsche's famous self-estimate in *Ecce Homo:* "I am not a man, I am dynamite."

The same note was sounded by Ludwig Stein in his little *Friedrich Nietzsches Weltanschauung und ihre Gefahren* (1893). Stein calls his book a signal of alarm, a literary tocsin. He warns against Nietzsche's writings as intellectual bombshells, and even more against the Nietzscheism of his time. The literature on Nietzsche seems to him sinister, and he predicts there will soon be a widespread Nietzsche vogue. The Viennese philosopher Joseph Clemens Kreibig, in his *Geschichte und Kritik des ethischen Skeptizismus* (1896), likewise finds Nietzsche's ideas on ethics repulsive and dangerous. He best expresses his attitude when he says that Nietzsche's works leave us with a feeling of anxiety and fear. He sees in Nietzsche the radical moral sceptic who considers every moralist an imbecile, and whose "power man" is characterized by brutality, cruelty and conceit. Another book of this period, Theobald Ziegler's *Friedrich Nietzsche* (1900), based on lectures given in 1897/98, comes to a similar conclusion, and so does Arthur Drews in his book *Nietzsches Philosophie* (1904). These authors emphasize and resent Nietzsche's unscientific attitude, his self-contradictory and paradoxical contentions, particularly with regard to ethical and social problems. They are startled and repelled by his condemnation of utilitarianism and democracy, by

his attack upon the ethic of compassion and love for one's neighbor, and by his exalted praise of the strong, ruthless individual and the powerful race, destined to dominate and to enslave inferior individuals, the "much too many," and the inferior nations.

It is by no means surprising that this should have been the first reaction to Nietzsche. His attack upon all modern ethics, upon all the democratic and progressive forces of his time, was naturally odious to all liberal thinkers. The labor problem was on every one's mind, and here was a philosopher who advocated a new form of slavery and who went so far as to say: "The labor question?—there are certain things about which one does not ask." And the reason for this apparently brutal attitude: that every higher civilization needs slavery in one form or another! Nietzsche seemed to stand for everything reactionary, as the champion of ruthless selfishness and brutality.

In France the first reaction to Nietzsche's writings, according to Bianquis, was equally one of indignation and scandal. One of his first critics, Jean Bourdeau, declared his philosophy perverse, aristocratic and cruel; another, Wyzewa, considered his work morbid, destructive and nihilistic; and a third, Edouard Schuré, pictured Nietzsche as a sort of Antichrist and his philosophy as a sepulchre sculptured in marble but covering naught. Though in 1893 Henri Albert wrote in the *Mercure de France* that in France Nietzsche was famous but hardly known, Nietzsche soon won a great success in that country, unequalled elsewhere outside of Germany. He was, as Bianquis points out, loved and hated, glorified and scoffed at, "transvalued" in the most unexpected way. Around the turn of the century there existed in France (and not only there) what Bianquis calls a "*Nietzschéisme de salon,*" expressing itself in numerous journals and novels, so that a noted French philosopher, G. Belot, could call Nietzsche the "*immoraliste à la mode.*"

Already different social movements had begun to claim Nietzsche as their own. Even during his lifetime the Antisemites had made repeated attempts to bring him into their ranks, but these attempts had utterly failed. His opposition to Antisemitism was one point on which he never changed his opinion. Now the Social Darwinists saw in Nietzsche their prophet. Here was a thinker who pled for abandoning the outdated ethics of humanitarianism and who could be considered a fellow-champion in the struggle for

race improvement through annihilation of the weak and sick. A book such as Alexander Tille's *Von Darwin bis Nietzsche* (1893), is perhaps the most characteristic example of this trend. Tille calls Nietzsche an evolutionary utilitarian because he bases his new ethical doctrine upon the theory of evolution. What Tille means by utilitarianism, however, becomes clear in his own famous statement that the slums of East London are England's national sanatarium.

About the time of Nietzsche's death, however, the opinions concerning Nietzsche seemed to change, and to give way to a more objective and theoretical appreciation of his philosophy. This change may have been due in part to the influence of the ever-growing literature on his mental illness. Attempts like that of Moebius to prove almost his entire work the product of a lunatic, contributed considerably to a more lenient attitude towards his philosophy. Alfred Fouillée in his *Nietzsche et l'immoralisme* expresses this view quite clearly, when he says that his feelings towards Nietzsche's work may be summarized as "a combination of admiration and pity." This is an attitude similar to that of William James, who speaks in his *Varieties of Religious Experience* of "poor Nietzsche" and his antipathy against the sick and weak who are undermining the vitality of the race, an antipathy that is itself "sickly enough."

In France a calmer and more objective attitude towards Nietzsche had undoubtedly been inaugurated by Henri Lichtenberger's *La philosophie de Nietzsche* (Paris, 1898), which opened the way for further serious studies. Lichtenberger compares Nietzsche to Ibsen's Brand, as the man of all or nothing who follows his will to the bitter end without permitting anything to stop him. He sees a certain grand unity in Nietzsche's life, dominated throughout by the same instinct, the will to be true to himself at all times and at any cost. Nietzsche, according to Lichtenberger, was an atheist from religiosity, an immoralist through his moral conscience, an egoist out of altruism. He can be dangerous—particularly to those who are egotistic by nature—if he is badly read and misinterpreted; otherwise his influence ought to be stimulating and beneficial for a better understanding of human nature if he is taken as a "physician of the soul."

Moreover, the greater the interval that elapsed after the publication of Nietzsche's works without his social and political

theories exerting any tangible influence upon actual political or social movements, the more men were inclined to take with a grain of salt his outbursts against democracy and socialism, as well as against Christian ethics and German education and politics, and to look upon them as another strange exhibit in the curiosity shop of modern literature. The German educator Julius Reiner in his *Nietzsche der Immoralist und Antichrist* (1901, repr. 1916)—to take only one example—emphasized the fact that life had not been touched by the mighty blows Nietzsche had aimed against it. His struggle against current morality and religion as well as against all the abuses in state and society had brought forth no real results. The idols his free spirit had attacked continued to exist, and their vitality was increasing rather than diminishing.

Of greater importance for the development of a more objective attitude towards Nietzsche was another factor. With the re-awakening of the interest in philosophy and the humanistic disciplines in general, the interest in Nietzsche began to shift from his moral and political ideas to his contribution to theoretical philosophy and psychology. This shift of emphasis in the interpretation of Nietzsche is perhaps even more remarkable than the change in the evaluation of his work.

This philosophic interest first centered upon Nietzsche's critique of modern civilization and history. He became the "*Kulturphilosoph*" κατ' ἐξοχήν.[2] It was particularly the monograph by Alois Riehl, *Friedrich Nietzsche, Der Künstler und der Denker* (1897 and many later editions), which drew attention to this aspect of his philosophy. In fact, Riehl puts Nietzsche's conception of culture in the foreground and calls him "the Rousseau of our times." The civilization which Nietzsche conceives as the goal of humanity is one of great individuals, of the true man; the aim of all culture is the production of the genius. To this conception his fight against the morality of compassion is but a corollary. His main principle is the affirmation of life, he is the philosopher who persuades men to live: passionate love of life is the central theme of his philosophy. What he is searching for is the noble man, the man who is master of his virtues, the man who has power over himself and his fate. "Just as it was by no means Rousseau's in-

[2] This point has lately been again emphasized by Frederick Copleston, *Friedrich Nietzsche, Philosopher of Culture* (London, 1942), who tries to show "how the ideal of an ascending culture runs as a *leitmotif* through the whole of Nietzsche's thought."

tention to lead mankind back into the forest, neither does Nietzsche intend to revive the 'blond beast' or the 'predatory man.' "

It is one of the main differences between the more recent interpretation of Nietzsche and the first reactions to his thought that men have begun to understand his exalted language in an allegorical way. This is true of one of the most profound studies of Nietzsche, Georg Simmel's *Schopenhauer und Nietzsche* (1907). Simmel conceives Nietzsche's philosophy as the purest exposition of the idea of evolution. Life is an absolute value; everything else has value only in so far as it helps to affirm and to enhance life. The possibility of an infinite historical evolution takes the place of salvation. The world-process has no goal, but in certain individuals the human species advances to a higher stage. Simmel sees that Nietzsche's "immoralism" is not the negation of all morality, but only the attempt to fill the moral "ought" with new contents, to replace the current morality with new and higher standards: the ethics of the superior man. Simmel considers it one of the strangest mistakes in the history of ethics that men should ever have misinterpreted this doctrine as an apology for idle egoism and Epicurean licentiousness—which would have appeared to Nietzsche himself as the expression of utter decadence. Karl Joël, in his *Nietzsche und die Romantik* (1906), says in a similar vein: "Nietzsche's abolition of ethics—was it not itself ethical, a critique of morality through morality—a spiritual process?"

While Simmel understands Nietzsche as the first representative exponent of personalism, others, such as Ludwig Klages, Hans Prinzhorn, and more recently Werner Brock, have emphasized Nietzsche's contribution to psychology. Klages considers him the "greatest psychologist," or, as he says, "*Seelenkenner*," "of all time." Klages discovers in Nietzsche his own philosophy, which is based upon the distinction between the intellectual and the biological side of the ego, in other words, upon the chasm between intellect (*Geist*) and soul (*Seele*). Nietzsche, by siding with life (which is in its essence a-logical and anti-intellectual), considers the intellect a pathological form of life. According to Klages, he was the first man in history to "examine the intellectual phenomenon as to its intention, i.e., as to its biological value—without prejudice or benevolence, with the eyes of antagonism towards the intellect." "It was and is the fate of Nietzsche to be discovered

again and again," said Ernest Aster in his recent *Die Philosophie der Gegenwart.* One is reminded of these words in reading Ludwig Klages' *Die psychologischen Errungenschaften Nietzsches.* However, it is true that Nietzsche became the father of a strong irrationalistic trend in recent German philosophy, from which unmistakable lines of connection lead to certain political slogans of National Socialism, such as "the destructive intellect," "blood and soil," and the "Myth of the twentieth century." Hans Prinzhorn, himself a disciple of Klages, e.g., praises Nietzsche for having searched for the roots of individual "fate-character" in the vital or biological stratum of "blood-heritage" (*Bluterbe*) and "culture-space" (*Kulturraum*), and no longer in the intellectual factors of culture, ideals and morality, and for having considered man as problematic because of man's specifically human traits.

However, just as the new "*Lebensphilosophie*" and other forms of irrationalism claim Nietzsche, so has his critique of truth and knowledge been discovered by the philosophy of the "As If." Hans Vaihinger, who had published in 1902 a little study *Nietzsche als Philosoph,* which tries to give an objective exposition of Nietzsche's "*bunter und krauser Gedankenwelt*" [colored and queer ways of thought], emphasizing mainly his social, moral and anti-religious ideas, devotes an entire chapter of his book *Die Philosophie des Als Ob* to Nietzsche's theory of illusion. He shows how familiar Nietzsche was with the ideas of F. A. Lange, and how he developed his critique of knowledge to a point where he considered such essential features of modern science as the concept of natural law or the atomic theory in physics as mere fictions.

The starting-point for such considerations is of course Nietzsche's early study on *Truth and Lie in an Extramoral Sense,* where he tries to understand all truth as an illusion and our whole system of categories and concepts as something artificial. He compares this system to the pattern of mathematical lines by which the Romans and Etruscans divided and subdivided the sky, in order to place the proper god in each segment. This sky of our concepts, as he later points out, contains such ideas as causality and purpose, subject and material object, phenomenon and thing in itself. Combined with this more or less Kantian approach we find a more biological or even "pragmatic" conception of knowledge. Thus, e.g., in the famous passage in *Beyond Good and Evil:* "The falseness of a judgment is no argument against a judgment. . . . The

question is how far it furthers life, preserves life, how far it is species-preserving or even species-cultivating." A further development of this "pragmatic" and at the same time "fictional" conception of knowledge is represented by the theory of perspectivism in *The Will to Power*. These pragmatic features in Nietzsche's philosophy have been repeatedly emphasized; first, perhaps, by the French philosopher René Berthelot, then by Richard Mueller-Freienfels, and more recently by Max Scheler. Scheler, in his *Die Wissensformen und die Gesellschaft,* calls Nietzsche's position a vitalistic pragmatism because it is characterized by his new, activistic conception of life. Recent studies on the sociology of knowledge have utilized further Nietzsche's theory of truth. In fact, Karl Mannheim considers him one of the sources of the modern theory of ideology and of the sociology of knowledge. Nietzsche's theory of the *ressentiment,* his identification of certain modes of thought with an aristocratic society, and his entire master-slave cliché, provide ample material for such discussions (as, e.g., by Grünwald, Heinzmann, and De Gré).

Gradually we are beginning to see Nietzsche's ethic, or, as Robert Reininger calls it in his *Friedrich Nietzsches Kampf um den Sinn des Lebens; Der Ertrag seiner Philosophie fuer die Ethik* (1922), his "struggle for the meaning of life," in a more favorable light. Naturally such books as Reininger's or Raoul Richter's *Friedrich Nietzsche, sein Leben und sein Werk* attribute more importance to the second, positivistic period of Nietzsche's philosophy. Richter goes so far as to say that Nietzsche's theory of value is the field to which Nietzsche will owe his position in the history of philosophy. The essence of this value-theory is: 1) the combination of radical negativism, the negation of all general ideals, with radical idealism, an emphasis upon his own ideals; 2) a transformation of Schopenhauer's pessimistic voluntarism into an optimistic voluntarism; 3) an affirmation of life, in the sense of an aristocratic order of values, according to which the goal is the preservation and cultivation of the strong individual and not of the mass of the weak.

Reininger centers his book upon the thesis that for Nietzsche true ethics is to be based on the autonomous will of the moral personality. This will is a natural instinct of certain individuals—individuals of a certain type of *Vornehmheit* or spiritual nobility. However, this ethics has little concern with the every-day concep-

tions of morality which Nietzsche never thought of discarding or even doubting. On the whole, one might say that such studies as those of William Mackintire Salter or George B. Foster are based on a similar attempt at a sympathetic understanding of Nietzsche's ethics as an ethics of the "free spirit." Characteristic for this attitude are the words of Foster regarding Nietzsche: "The world needs him as never before. His religion is the religion of life, of beauty, of strength, and must not perish from the earth."

Such emphasis upon the positive significance of Nietzsche's ethics has, of course, not remained uncontradicted. Crane Brinton, in his recent book on Nietzsche, e.g., criticizes such books as Charles Andler's and William M. Salter's for bowdlerizing, sugaring and softening Nietzsche's doctrines. However, if one tries to read Nietzsche impartially one is apt to arrive at just such conclusions with regard to his ethical ideas. Karl Jaspers makes a similar point in the voluminous book on Nietzsche to which he gave the subtitle: "*Introduction to the Understanding of Nietzsche's Philosophizing,*" thus indicating that it is more important to understand Nietzsche's approach to philosophic problems than his ambiguous or even contradictory results. He finds that Nietzsche attacks morality in its present form, not in order to free men from their chains and fetters, but rather in order to burden them with greater weight and yet to force them to higher levels. Nietzsche's attack upon morality, in his opinion, presupposes a value standing above every individual morality. And even when Nietzsche says that "no morality in itself has value," he must still assume a positive standard by which to judge. By the same token Jaspers shows that, in spite of all questioning, there is in Nietzsche a strong if indeterminate will for truth as a passionate desire; and even Nietzsche's very struggle for truth presupposes this truth again and again as something self-understood.

A very affirmative attitude towards Nietzsche's work is revealed also in a number of books by Ernst Bertram, Ernst Gundolf and Kurt Hildebrandt, all coming from the group around Stefan George, to which a certain affinity for later National Socialist doctrines has been repeatedly and not wrongly attributed. They picture Nietzsche-Zarathustra as the great prophet of the heroic life in his struggle against the nineteenth century and its forces of tradition and decadence.

The metaphysical aspects of Nietzsche's philosophy have been

particularly emphasized in recent Nietzsche literature. Hugo Fischer in his *Nietzsche Apostata oder die Philosophie des Ärgernisses* (1931) understands Nietzsche's philosophy as a renewal of the "classical realistic metaphysics." This "healthy" metaphysics is symbolized as Dionysos, who stands for the "innocence of becoming." Change and temporality are essential features of this metaphysics; the idea of eternal recurrence is its keystone and climax. Thus a sudden new interest seems to center upon the myth of eternal recurrence. In the more positivistic literature on Nietzsche this myth had been treated as a rather strange interlude in the philosophy of Nietzsche, at one time so much opposed to all metaphysicians that he termed them "*Hinterweltler*"; or it had been pictured as a kind of moral postulate, a regulative idea, to use Kant's expression. In fact, Georg Simmel had compared it to Kant's first formulation of the Categorical Imperative; in Nietzsche the infinite repeatability of an act takes the place of its applicability as a general law, which to Kant had been the criterion of ethical value.

Now Karl Löwith devotes a whole book to *Nietzsche's Philosophie der Ewigen Wiederkunft des Gleichen* (1935), in which, to be sure, he also points out the artificial character of Nietzsche's "Dionysian metaphysics." Jaspers emphasizes Eternal Recurrence as the idea through which Nietzsche hoped to escape all world-negation. Only by means of this idea was Nietzsche able to overcome the "death of God," and at the same time the "naught." "This notion had the power to enhance the realization of the world and with it the status of man." This is the reason why Nietzsche could say of the theory of Eternal Recurrence that "this idea contained more than all those religions which despise this life as something transitory," and why he could call it "the religion of religions." In a similar vein, George A. Morgan says that the idea of Eternal Recurrence "appealed to Nietzsche not primarily as a cosmological theory, but as a way to transform humanity and escape nihilism: in short, it came as a new religion."

Thus it may not seem surprising that more and more Nietzsche the atheist has begun to appear as a religious thinker. August Vetter, in a monograph which applies psycho-analytic categories to the understanding of Nietzsche, considers the idea of Eternal Recurrence "the exaggerated sublimated expression of the most immediate vital urge for resurrection and rebirth which—in chang-

ing forms—can be found in all religious and metaphysical dogmas and creeds." William M. Salter, who, in an article in the *Journal of Philosophy,* also attributes to the doctrine of Eternal Recurrence "a semi-religious significance," thinks that Nietzsche was "at bottom a religious philosopher." In the last volume of his *Nietzsche, Sa Vie et sa Pensée,* the most extensive and detailed study of Nietzsche, more important from a biographical and literary than from a philosophic point of view, Charles Andler speaks of the doctrine of Eternal Recurrence as *"une grande intuition mystique,"* and comes to the conclusion that Nietzsche represents "the last flowering of Pietist Protestantism." And Friedrich Würzbach goes even further: he thinks that in our times Nietzsche is "the only religious man in the grand style."

In addition to the doctrine of Eternal Recurrence, Nietzsche's "Heraclitism" has been emphasized as a new metaphysics. Alfred Baeumler in particular has considered the doctrine of the eternal flux, of the "innocence of becoming," to be the characteristic feature of what he calls Nietzsche's philosophical system. At the same time, Nietzsche's doctrine of the will to power takes on for him a new meaning! It is the expression of Nietzsche's "Germanism"; for it involves Nietzsche's "Siegfried attack" upon Western civilization as a combination of Christianity and Romanism. Works such as Baeumler's have introduced the most recent Nietzsche Renaissance we are witnessing today. During this past decade Nietzsche has become the patron-saint of National Socialism.

However, this has not been the first time that Nietzsche's political ideas have been utilized for a nationalistic and reactionary movement. Through Pierre Lasserre's book *La Morale de Nietzsche* (1902) some of Nietzsche's political notions, as Bianquis and Wilhelm point out, deeply influenced the leaders of the *Action Française,* such as Léon Daudet and Charles Maurras. Benito Mussolini, while still in the socialist movement, was strongly attracted by Nietzsche's ideas, and later publicly declared himself a disciple. On the other hand, it may be worth mentioning that there are also students of Nietzsche who have come to the conclusion that he was really a sincere socialist: this position is argued by Eugène de Roberty in his *Frédéric Nietzsche, Contributions à l'histoire des idées philosophiques et sociales à la fin du XIXe siècle* (1902), and by Charles Andler in the fifth volume of his work on

Nietzsche. Andler's reasons for this paradoxical classification are mainly that Nietzsche urges that competition be confined within narrow limits, that he considers large property a public danger, and that he demands that all industries like transportation and trade, particularly trade in money, be handed over to the public community.

Recently a popular Nietzsche literature has sprung up in Germany claiming Nietzsche as a prophet and forerunner of National Socialism. Heinrich Haertle's *Nietzsche und der Nationalsozialismus* (1937) is representative of this trend. This book consists mainly of a collection of quotations from Nietzsche which are supposed to prove that he was in fact the spiritual father of the new movement. Richard Oehler's *Nietzsche und die deutsche Zukunft* (1935) is written in a similar vein. Oehler even tries to prove that Nietzsche was an Antisemite in spirit, though Nietzsche's opposition to Antisemitism is beyond question. There is no need to refute this literature. It has been done in an excellent way by Henri Lichtenberger, Frederic Copleston and D. Gawronsky. In *Ecce Homo* Nietzsche mentions with horror that the Prussian *National Zeitung* had characterized his work as the true and genuine "Junker philosophy." He would probably have felt similarly about this new interpretation of his political philosophy. Nietzsche, the foe of "the mendacious race swindle," the advocate of a new "anti-Antisemitism" who considered the state a "cold, bloodthirsty monster," is certainly far from modern Fascism. It is hard to imagine that the "good European" who abhorred the "névrose nationale" from which Europe suffered in his time could have been in accord with the super-nationalism of present-day Germany.

This, however, by no means proves that Nietzsche's philosophy may not have had a large share in paving the way for the rise of all these political doctrines. The irrational tendencies which pervade his philosophy, his praise of strength and power, may have exerted at least an indirect influence on these political ideologies. The important point, however, is that Nietzsche would have abominated the degradation of humanity we have witnessed in recent years. May not even his ideal of power have implied originally something quite different from violence and brutality? "The Germans," he says once, "imagine that power must reveal itself in harshness and cruelty; then they submit gladly and with ad-

miration. . . . That there is power in gentleness and quietness they do not easily believe."

Anything can be proved from Nietzsche's writings if one takes him literally. But did he want to be taken literally? In 1884 he wrote to his sister: "Who knows how many generations will have to pass to produce even a few men who can feel what I have accomplished in all its profundity! And even then, the thought fills me with horror what unauthorized and completely incompetent men will refer to me as their authority."

New York City.

THE GENESIS OF THE CONCEPT OF SCIENTIFIC PROGRESS*

By Edgar Zilsel

The modern scientist looks upon science as a great building erected stone by stone through the work of his predecessors and his contemporary fellow-scientists, a structure that will be continued but never completed by his successors. In this work he wants to coöperate. His object is either the mere theoretical aim of constructing this building, or he follows a utilitarian view, links the progress of science with the progress of civilization, and has in mind the benefit to mankind produced by the practical application of theory. No modern scientist, however, would dare to confess personal advantage or fame as his incentive. This means that science, both in the theoretical and the utilitarian interpretation, is regarded as the product of a coöperation for non-personal ends, a coöperation in which all scientists of the past, the present, and the future have a part. Today this idea or ideal seems almost self-evident. Yet no Brahmanic, Buddhistic, Moslem, or Catholic scholastic, no Confucian scholar or Renaissance humanist, no philosopher or rhetor of classical antiquity ever achieved it. It is a specific characteristic of the scientific spirit and of modern Western civilization. It appeared for the first time fully developed in the works of Francis Bacon.

It was shown by J. B. Bury that before Bacon only scanty rudiments of the concept of progress are found in Western scholarly literature.[1] Since Bury, however, is interested in the idea of cultural rather than of scientific progress, he deals chiefly with statements about the general course of history: his discussion of the pre-Baconian period gives an illuminating analysis of the classical

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[1] *The Idea of Progress* (London, 1924). Cf. also Jules Delvaille: *Histoire de l'idée de progrès* (Paris, 1910).

conception of cultural history but does not investigate the classical conception of science. Moreover, the sociological origin of Bacon's ideas is not traced in his excellent book. We shall therefore try to show that the modern idea of progress through coöperation stems, like many other elements of modern scientific procedure, from the superior artisans of the fifteenth and sixteenth centuries. To elucidate the social causes of this specifically modern intellectual development we must, for purposes of comparison, give also a brief analysis of the classical concept of science. This introductory account, however, must be restricted to an outline and will be documented elsewhere.

We shall use the term "the ideal of scientific progress" to include the following ideas: (1) the insight that scientific knowledge is brought about step by step through contributions of generations of explorers building upon and gradually amending the findings of their predecessors; (2) the belief that this process is never completed; (3) the conviction that contribution to this development, either for its own sake or for the public benefit, constitutes the very aim of the true scientist. (This conviction excludes personal advantage and personal fame as ultimate aims.) The breakdown in the early modern era of the unrestricted authority of Scripture, of the church fathers and scholastics, and of Aristotle and classical antiquity, is indeed a necessary condition for the rise of this ideal of scientific progress, but does not yet constitute the ideal itself; it will therefore be discussed only insofar as it is combined with at least one of the more general ideas above. From the fourteenth to the sixteenth century the scholastics, Aristotle, the humanistic veneration for antiquity, and Galen were frequently attacked from very different angles without any clear conception of progress. An author's awareness that his own or a contemporary's achievements have refuted the doctrines of an authority of the past (e.g., Copernicus vs. Ptolemy) does not yet make him an advocate of the ideal of progress.

1. The virtual absence of the idea of progress in classical antiquity is closely linked with the different rôles played by science in classical and in modern civilization. While modern education emphasizes scientific instruction, a characteristic combination of metaphysics and rhetoric was the backbone of higher education in classical antiquity. Even in the post-Alexandrian period there

were fewer special sciences and many fewer scientific specialists than in our time. The six or seven distinct sciences which developed were less separated from philosophy on the one hand, and from literature on the other: apart from the "physicists" and historiographers, it was nothing unusual for an outstanding astronomical specialist, like Ptolemy, to begin a highly technical work with an exposition of the aims and divisions of philosophy, or for Hipparchus to engage in polemics with the author of an astronomical poem.

Yet it would be an overstatement to characterize scientific activity in classical antiquity as a merely individualistic undertaking. Classical science had rather reached, approximately, that degree of continuity and coöperation which in our era is characteristic of philosophy. Findings of predecessors were used most systematically by the astronomers, but the fund of undisputed knowledge remained comparatively small, and scientific "schools" combatting or ignoring each other were the rule. This is especially conspicuous in classical medicine. Systematic efforts to organize research were never made and the theoretical achievements were due to a few eminent individuals—as in modern philosophy. There were neither laboratories in which scientists could coöperate nor learned periodicals in which scientific findings could be discussed. No scientific publications, no astronomical or geographical investigations which are the work of several collaborating scientists are known, and even the cyclopedias and compendia of the Alexandrian and Roman period were composed by single polyhistors.[2]

This difference in organization also manifests itself in a different intellectual attitude among scholars. It was far from the thought of classical scientists to speak of their publications as "contributions" to science[3]—a phrase characteristic of the modern, non-individualistic concept of research. And in the extant literature it is an exception when a popular treatise predicts that the solution of a problem at present unsolved will be regarded as a

[2] The Septuagint is the only literary product of classical antiquity composed by several authors in collaboration.—Otto E. Neugebauer explains the absence of "systematic organized collaboration" through the scarcity of scientists ("Exact Science in Antiquity," in: *Studies in Civilization* [Philadelphia, 1941], 25).

[3] Almagest I, 1 (p. 4, Heiberg) is an exception in the extant literature (προαιρούμενοι . . . προσθήκην συνεισενεγκεῖν).

triviality by generations to come.[4] The Hippocratic physicians and the astronomers came nearest to the modern idea of scientific continuity. The Hippocratics sought to establish a tradition of knowledge in their corporation and even composed case histories of their patients, which, however, were not intended for publication. And the astronomers composed star catalogues to be used by future scientists. Yet the only passage in the extant literature which clearly expresses the idea of the gradual progress of knowledge, or better, technological skill, occurs in a treatise on artillery. There the author, one Philo of Byzantium (third or second century B.C.), states that the early war machines were rather poor; only the later Alexandrian engineers put artillery on a sound basis "partly by learning from the earlier constructors, partly by observation of later trials."[5] His remark, brief as it is, expresses the gist of the idea of scientific progress: the method of trial and error used by subsequent generations of experts. Philo however was not a scholar but a military engineer, i.e., a superior artisan with some mathematical knowledge. The Alexandrian military engineers (Philo, the two Ctesibius', Hero) were never admitted as fellows to the Alexandrian Museum.

These differences between classical and modern science point to and are rooted in the basic fact that in antiquity, in contrast to the modern era, science was for the most part not put to practical use, and hence hardly influenced everyday life. When classical theorists wanted to apply their findings to practical life, they restricted themselves to morals and politics (like most of the philosophers), war machines (like Archimedes), or medicine. A scientific technology was non-existent and apparently not required. Machines were used in warfare and as toys, but except for the simplest ones, never in the production of goods or in traffic. As has been often pointed out, this basic fact is probably accounted for by the existence of slave labor.[6] Classical culture was, moreover, carried

[4] Seneca, *Nat. quaest.* VII, 25 and 31, on the orbits of the comets. Cf. Bury, *loc. cit.* 13.

[5] *Belopoika,* ed. Diels-Schramm, *Abhandlungen d. kgl. preuss. Akad. d. Wissenschaften* (1918), *philos.-histor. Klasse,* no. 16, p. 9.

[6] Cf., e.g., H. Diels: *Antike Technik* (3rd ed. Leipzig, 1924), 29–35, 40 ff. More recently a well-documented account of classical technology was given in A. Rehm: "Zur Rolle der Technik in der griechisch-römischen Antike," *Archiv für Kulturgeschichte,* XXVIII (1938), 135–162. Rehm's explanation of the absence of machinery (the great number of metics), however, is not satisfactory.

by a rather thin upper class living on incomes derived from landed property. The intelligentsia and the bulk of the writers were either themselves members of this leisure class or were attached to their households as tutors to their sons and dispensers of prestige. Even the fellows of the Alexandrian Museum were basically court-scholars. Teachers of rhetoric and philosophy, attorneys, physicians, and "architects," i.e., engineers, were the only professional men. The engineers, however, can compare neither in education nor number nor influence with their modern colleagues. Small wonder, therefore, that the classical concept of knowledge differs from the modern one. With the simplifications unavoidable in a brief survey of a thousand years, one may state that the educated classes of classical antiquity, looking down upon all manual activities, esteemed speech-making and metaphysical speculation more highly than experimentation and dissection, and scarcely overcame a certain disdain for people who, with their hands or otherwise, worked for a living.[7]

Civil engineers, scientifically trained civil servants, research workers in laboratories and scientific institutes, could have replaced the individualistic desire for fame of the classical aristocrats and literati with the spirit of coöperation for objective ends. They could have taken over, from the artisans, the aim of gradually increasing knowledge through the method of trial and error. This method and this aim develop easily among craftsmen who have freed themselves from the bounds of the mere workshop tradition. But primitive theorists who have just detached themselves from the traditional mythology everywhere and always want to grasp the universe in a few basic insights. And they are much too convinced of the final truth of their speculations to realize that knowledge progresses only step by step. However sophisticated the later Greek philosophers and scholars were, most of them never completely got rid of conscious or unconscious remnants of this archaic attitude of the Ionian seers. There developed various sceptical "schools," but not the ideals of scientific progress and coöperation. In an aristocratic society without machines but with slaves these ideals could apparently not unfold.

2. This sociological analysis of classical science is confirmed by and sheds light on the intellectual development of the early modern

[7] Exceptions: Thucydides II, 40, Socrates, the Cynics, Dio of Prusa, and others.

era. For obvious reasons the ideal of the progress of knowledge was foreign to the medieval schoolmen.[8] The Renaissance humanists, the first secular scholars of the modern era, likewise did not stand for scientific progress, since with few exceptions (Benedetto Accolti, Pico della Mirandola), they considered the classical authors unsurpassable. Viewed sociologically, the humanists were dispensers of prestige who sought by their polished style and their erudition to make their protectors, and themselves, famous. The open admission that fame is the goal of all literary activity appears even more frequently in the humanists than in the classical literati, either because the purely individualistic conception of the literary profession was actually more developed in the Renaissance or only because more literary testaments are extant. One example, relating to mathematics, may illustrate this frankness. In 1621 the French humanist Claude Gaspard Bachet published the first Greek edition of the *Arithmetic* of Diophantus, dedicated to an influential lawyer. In the preface the humanist explains that, "in honorable emulation for fame," he is thinking day and night how he might become as famous as his patron. After examining all disciplines he decided to choose mathematics "since it wonderfully delights the mind and since in mathematics the subtlety of the intellect especially comes to light. This Diophantus will give evidence whether I have deserved fame beyond the ordinary mathematicians."[9] The possibility that the publication might further science is not mentioned. Analogous expressions of glory worship occur very frequently in the more literary writings of the humanists.[10] On the other hand, in the humanist literature of the Renaissance there seems to be no case in which an author states that he is publishing his treatise in order to make further investigations possible. We shall see how differently the contemporary craftsmen express themselves.

[8] It was, however, known to the scholastics that, "because of the defects of knowledge of those who first invented the sciences," the sciences in the course of time increased (*augmentum factum est*) and that the same is true in practical matters (*in operabilibus*). Cf. Thomas, *Summ. Theol.* II, 2, qu. 1, art. 7, obj. 2, and II, 1, qu. 97, art. 1.

[9] Reprinted in Beriah Botfield: *Prefaces to the First Editions of the Greek and Roman Classics* (London, 1861), 656.

[10] Examples: Filelfo: *Epistolae familiares* (Venice, 1502), 12 r, 54 v.; Emile Legrande: *Cent-dix lettres greques de Filelfe* (Paris, 1892), 63; Georg Voigt: *Die Wiederbelebung des classischen Altertums*, 3rd ed. (Berlin, 1891), 334, 446, 527; E. Zilsel: *Die Entstehung des Geniebegriffes* (Tübingen, 1926), 111–123.

It is evident that the individualistic professional ideals of the humanists were incompatible with scientific coöperation. Rivalries, quarrels, and personal intrigues accompanied the literary and scholarly careers of almost all of them. Although after the late fourteenth century literary circles and meetings of humanists became frequent in Italy, there exists in the humanist as little as in classical literature any encyclopedia or dictionary composed by several authors in collaboration. Only the great humanist printers and publishers in Venice, Basel, and Paris who employed numerous classical scholars as editors and proofreaders achieved a certain amount of coöperation among their learned assistants.[11] Printing, however, was a "mechanical" art, and the publishers, though themselves classical scholars, were not literary dispensers of glory but business men. Their printing houses were among the biggest and best organized plants of the sixteenth century.

3. In the workshops of the late medieval artisans coöperation resulted quite naturally from the working conditions. In contrast to a monk's cell or a humanist's writing chamber a workshop or dockyard is a place where several people work together. On the other hand the guilds stressed the continuity rather than the progress of craftsmanship. The apprentice learned the workshop tradition from his master and was taught to honor it as the master had honored the tradition of his master's workshop. Rising capitalism and economic competition, however, broke the power of guild tradition. Only the artisan who had either invented some commercial or technological innovation or who understood the value of the invention of another fellow became a capitalistic manufacturer. Thus the inventive genius of the individual gradually came to the fore. The professional ideals of the early capitalistic artisans can be inferred with some probability. As petty manual laborers they could not well strive for literary immortality like the humanists. Social conditions directed them to more impersonal goals. If they wanted to justify their work and their inventions they had to refer to the glory of God and the Saints, of the craft

[11] The first of them was Aldo Manuzio. He founded the *Neo-Academia* in Venice about 1500; most of the members were his assistants. The humanistic "academies" of Ficinus in Florence, of Pomponius Letus in Rome, and of Pontanus in Naples, all of them in the later half of the fifteenth century, held debates and banquets but did not do real research. Cf. Michele Maylender: *Storia delle Accademie d'Italia* (Bologna, 1926), I, 125 ff.; IV, 249 ff, 320 ff, and 327 ff.

and the workshop—and to the usefulness of their craft and the public benefit.

These ideals are in fact expressed in several treatises composed by superior artisans, such as artists, instrument makers, and gun makers. Sometimes the authors even declared that they intended to further through their treatises the craftsmanship of their colleagues. Such statements reveal the social origin of the modern ideal of progress. To modern ears they may sound rather trivial. We must not forget, however, that in classical, scholastic, and humanist literature no statements on the necessity of the gradual improvement of knowledge exist. Naturally only members of the most highly skilled crafts wrote treatises, and only a few of these craftsmen-authors conceived the idea of progress with any clarity. Even in the sixteenth century a considerable number of the manual workers, particularly outside Italy, were illiterate.[12]

An early handbook of a secular craftsman was composed about 1400 by the Florentine painter Cennini. It is still imbued with the medieval guild spirit and deals with the making of pigments and the various techniques of painting; but being the treatise of an artisan it is also concerned with the painting of chests and the make-up of women. It circulated as a manuscript among the painters of the Quattrocento and is, like all similar treatises, written in the vernacular. Cennini composed his booklet as the title or better, *incipit*, explains, in the reverence of God, the Virgin, and the Saints, "and in the reverence of Giotto, Taddeo, and Agnolo and for the use and profit of any one who wants to enter the craft." Giotto was Taddeo's, Taddeo Agnolo's, and Agnolo Cennini's master: the author was well conscious of the continuity of craftsmanship. On the other hand Cennini states that he "will also make note of what he has tried out with his own hand." Although the addition hardly implies the idea of progress, it shows that Cennini no longer considers the mere workshop tradition as sufficient.[13]

[12] Johann Neudörfer (*Nachrichten von Künstlern und Werkleuten* [Nürnberg, 1547]; reprinted by G. W. K. Lochner, *Quellenschriften zur Kunstgeschichte*, X [Vienna, 1875]) discusses two illiterate masters even among the contemporary Nürnberg craftsmen: the locksmith Hanns Bulmann (d. 1549), the constructor of an astronomical clock, and the carpenter Georg Weber (d. 1567), the maker of complex wooden clockwork (pp. 65, 79). They were, however, manifestly exceptions (2 among 111 masters) and their illiteracy is mentioned as a curiosity.

[13] Cennini's *Libro dell' arte*, tr. D. V. Thompson, Jr. (New Haven, 1933); chests p. 170, make up 125, "with my own hand" 1.—The *Schedula Theophili* (11th

Almost a century later (1486) the printed treatise of a late Gothic master-builder clearly advocates the advancement of craftsmanship. Mathias Roriczer, an architect of the cathedral of Regensburg, is the author and his booklet is dedicated to his previous employer, the Bishop of Eichstädt. Although Roriczer treats the tradition of the craft with great reverence, his geometrical constructions are, he states, of his own invention. At the end of the dedication he emphasizes that he has not written his book for fame's sake but for the public benefit "and to better wherever something is to be bettered, and to amend and explain the arts." The public benefit (*der gemeine nutzen*) is three times mentioned as the aim of the author.[14] The dedication only expresses what probably all of the more inventive craftsmen of the period might have felt, but neither Plato nor Aristotle ever stated that his work was intended to mend philosophical shortcomings and to improve the state of philosophical knowledge. A hundred and twenty years later Francis Bacon proclaimed the advancement of knowledge for the benefit of mankind as the goal of the scientist. It is this ideal of progress, naturally in an embryonic form and restricted to the craft of the masons, that appears in Roriczer's treatise for the first time. "Progress" however has its limitations in the booklet of the Gothic master-builder. According to the regulations of the guild of the masons the secrets of the art had to be kept from laymen. But since Roriczer himself printed his treatise on his own printing press he could, and probably did, confine its sale to the members of the craft.

A few years before or after Roriczer's booklet, between 1484 and 1489, a similar but briefer treatise appeared in Nürnberg. It has no title and its author is an otherwise unknown Hans Schmuttermayer of Nürnberg.[15] The author treats not only the same

century) is composed by a monk, the sketch-book of Wilars de Honecourt (about 1255) was written only for Wilars' own workshop; in both works progress is not mentioned. For various reasons progress is not mentioned either in a few early modern treatises on the crafts, Ghiberti's *Commentarii* (1477), Lionardo's *Book on Painting* (c. 1496), Biringucci's *Pirotechnia* (1540), and Palissy's *Recepte véritable* (1563) and *Discours admirable* (1580).

[14] *Von der Fialen Gerechtigkeit* (How to build turrets correctly), ed. A. Reichensperger (Trier, 1845). The quoted passages in the dedication, p. 13.

[15] Reprinted with an introduction in *Anzeiger f. Kunde d. deutschen Vorzeit*, Neue Folge XXVIII (1881), 66–78. The quotation, p. 73.

topic but also has almost the same aims. In the initial lines he states that he is writing his book "for the betterment and adornment (*zu besserung und zierungen*) of the holy Christian church buildings, to . . . the instruction of all masters and journeymen who use this high and liberal art of geometry . . . so that they may better (*bass*) apply their imagination to the true reason of tracery. And not for my own honor's sake but rather to the praise of our ancient predecessors and the inventors of this high art." Although Schmuttermayer must have belonged to the craft it is well established that he was not a member of the masonic guild in Nürnberg where he was born and where also his book was printed. This is possibly an explanation of the fact that he published guild secrets.

While the two architects discussed still belonged to the Gothic style their younger contemporary, Albrecht Dürer, is a representative of the Renaissance. Yet Dürer also was of course, like all the artists of the period, a superior artisan. Dürer wrote three treatises. The first, *Unterweisung der Messung mit dem Zirkel und Richtscheit* (Instruction in Measurement with Compass and Rule), printed in 1525, deals with problems of practical and theoretical geometry and perspective. In the dedication to his learned humanist protector, the councillor of Nürnberg Pirckheimer, Dürer states that the German painters lack geometrical instruction. He composed the treatise "to benefit not only painters but also goldsmiths, sculptors, stonedressers, cabinetmakers, and all those requiring measurement." Nobody is forced, he adds as an apology, to use his doctrine. "I know however that he who accepts it will not only get a good start but will reach better understanding by daily practice; he will seek farther (*weitersuchen*) and find much more (*gar viel mehr*) than I now indicate."[16] Even more clearly is the idea of progress expressed in his book *On Human Proportion,* printed in 1528. The treatise gives extensive quantitative data on the proportions of the human body. In the dedication to Pirckheimer Dürer remarks that some people might blame him, because he, a non-scholar, teaches a subject in which he received no instruction. Yet, "risking slander," he published the book "to the public benefit of all artists and to induce also other experts to do the same so that our descendants may have something which they may augment and improve, so that the art of painting, in the

[16] Ed. Moriz Thausing, *Quellenschriften z. Kunstgeschichte* III (Vienna, 1872), 55 f.

course of time, may again attain and reach its perfection." Nobody is forced, he adds, to follow his doctrine everywhere, "for human nature has not yet so weakened that another could not invent something better." He goes on to point out the importance of original invention and expresses the conviction that the art will again become perfect "as in olden times"; then the German painters will not be inferior to any other nation.[17] Dürer manifestly put weight on coöperation and progress. In a letter to Pirckheimer he expressly requested the humanist to compose his preface to *On Proportion* so that it would not contain any "talk of glory" (*Ruhmredigkeit*), and to state that Dürer "begs those having something instructive to say on art, to publish it."[18] Progress, however, is not mentioned in his third treatise, *Etliche Unterricht zur Befestigung der Städt, Schloss, und Flecken* (Some instruction in the fortification of cities, castles, and towns), printed in 1527. In the dedication to the King of Hungary and Bohemia Dürer only states that the treatise was written "to the benefit of your Majesty and other princes."[19] Whether the Habsburg was delighted at the idea that other princes also might learn how to fortify their cities is dubious. Two remarks may be added to the three prefaces. Since, in contrast to Cennini, Roriczer, and Schmuttermayer, Dürer had to reckon also with non-artisans as readers, he apologizes for his writing books as a non-scholar. We shall frequently meet with analogous apologies. And it is, secondly, rather improbable that Dürer had ever read the booklets of the two Gothic architects. The fact that he has the same aim, the progress of craftsmanship, is due to the same sociological conditions, and possibly to oral tradition among the craftsmen rather than to literary influence. This applies also to the authors below.

Dürer died in 1528. In the sixteenth century kindred ideas were expressed by several craftsmen, the more clearly expressed the more remote the authors were from guild tradition. In 1547 one Kaspar Brunner, a Nürnberg master of ordnance, previously a locksmith and clock maker, composed a treatise on gunmaking and gunnery. He wrote it, as he states, "for his generation and

[17] *Ibid.*, 63 f. Dürer's opinion that classical painting was "perfect" is borrowed from humanism. Of course no classical painting was known to him.

[18] *Ibid.*, 61, items 1 and 7.

[19] *Ibid.*, 54.

others to come.''[20] Naturally, this remark is concerned not with fame but with the advancement of gunfounding. Since in the middle of the sixteenth century the technique of gunmaking was still a more or less strictly kept guild secret Brunner did not publish his manuscript but only presented it in four copies to the council of Nürnberg. About 1400 the poem of an anonymous German master-gunner had stressed secrecy; about 1530 the master-gunner of the Duke of Bavaria, Franz Helm, refused, for secrecy's sake, to publish his handbook on gunnery. On the other hand the *Feuerwerksbuch,* composed by an anonymous master-gunner before 1425, was printed in 1529 and, in a French version, in 1561.[21] This fading of guild secrecy shows how the idea that technology must be furthered through publication made headway in the sixteenth century.

In 1578 William Bourne of Dover in England pleaded the gradual progress of ''the arts and sciences'' as an excuse for publication. Bourne was an expert on measuring instruments, but probably no longer a member of any guild. Originally an innkeeper, he served as a gunner, did some surveying, and wrote several treatises on gunnery, surveying, and navigation. His style is sometimes clumsy, but he knew the mathematical and nautical literature as it existed in English and understood his subjects rather well. In 1578 he published a booklet, *Inventions and Devices.* It deals for the most part with military engineering and is addressed to ''all Generalles and Captaines.'' As in all his writings Bourne in the preface humbly apologizes for his lack of learning and his ''rude and barbarous volume.'' And there the idea of progress appears. His devices are deficient, as he states, because ''in any arte or science'' the first inventions are imperfect; ''yet they that came after them brought it into perfection.'' Looking to the future he expresses his hope that ''there may be some further matter gathered of his inventions'' and of course emphasizes his ''good will to profit the commonwealth.''[22]

[20] *Gründlicher Bericht des Büchsengiessens* (Extensive account of gun founding), printed *Archiv f. d. Geschichte d. Naturwissenschaften und Technik,* VII (1916). The quoted passage, p. 171 fol. 174 b.

[21] Cf. Max Jähns: *Geschichte d. Kriegswissenschaften* (München, 1889), I, 382, 384, 408, 591, 608.

[22] *Loc. cit.,* Preface to the Reader, about the end. On Bourne cf. B. G. R. Taylor: *Tudor Geography* (London, 1930), 153 ff. *Ibid.,* 155, an example of a

In 1581 the London instrument-maker Robert Norman, a retired mariner, published a treatise on the dip of the magnetic needle, which he had discovered. The booklet describes nautical instruments of his invention and on sale in his workshop; it contains astronomical tables and is intended to further navigation.[23] In a few remarkable sentences Norman discusses "the incredible delight" of the discoverer of new facts at his discoveries. Nevertheless he rejects these personal motives as "private fancies." He is rather convinced, as twenty-five years later Francis Bacon was, that new discoveries benefit society. In Norman's opinion scientific discoverers "chiefly respect either the glory of God or the furtherance of some publike commoditie." He considers it his duty to publish the discovery of the dip and to make his name "the object of carping tongues rather than such a secrete should be concealed and the use thereof unknowen." "Men," he states, "that will search out the secrets of their arts and professions and publish the same to the behoofe and use of others must not be condemned." Norman hardly felt restrained by medieval guild secrets. He rather justifies his publication because he was no scholar. Yet his apologies are characteristic of the early modern era. As we shall see Tartaglia, Peter Apian, and even Descartes deem it necessary expressly to vindicate the publication of their new ideas.

4. The two most important pioneers of scientific mechanics before Galileo, the Italian Tartaglia and the Dutchman Stevinus, were not artisans. Both were familiar with classical mathematics. Tartaglia published from Latin translations Italian versions of Archimedes and Euclid, Stevinus a French version of Diophantus. They had however no academic training but came to science from military engineering and commercial problems. Their writings contain important remarks on scientific progress and scientific coöperation.

Tartaglia (1499–1557) was a self-educated man, the son of a mailcoach groom brought up in direst poverty with little instruction. He made his livelihood as a mathematical adviser to gunners

triangulation carried out by Bourne. The method of triangulation had been invented in 1533 by Gemma Frisius of Louvain.

[23] *The Newe Attractive* (London, 1581). Quotations from the second edition (London, 1592), Preface to the Reader about the end, and Dedication to W. Borough, about the beginning. On Norman and his book cf. E. Zilsel: "The Genesis of W. Gilbert's Scientific Method," *Journal of the Hist. of Ideas,* II (1941), 20 ff.

and merchants at ten pennies a question. When his customers gave him a worn-out cloak for his lectures on Euclid instead of the payment agreed upon he had to litigate with them. This remarkable man published many books and treatises in the vernacular on gunnery, military engineering and mathematics, which greatly influenced nascent modern science and in which, for the first time in history, an embryonic form of the function concept is used to state a physical law.[24] In the dedication of his *Quesiti et Inventioni* (1546) Tartaglia states the motives of his publications. The man, he points out, who has found something new "and wants to own it for himself alone deserves no little blame. For if all our ancestors had behaved this way we should today differ little from irrational animals. To avoid this blame I have decided to bring to light my *Questions and Inventions* for everybody."[25] Scientific research and publication of the findings are here clearly recognized as a service to the public and prerequisites of progress. Tartaglia could not have taken this idea from the scholars of his period, since it was unknown to them. Though he was hardly regarded as a real member of the craft by the military engineers and gun-founders with whom he was in constant contact, his concept of science mirrors their frame of mind.[26]

Sixty years later Simon Stevinus (1548–1620) had a similar, though more successful career. Originally a bookkeeper of the municipalities of Bruges and Antwerp, Stevinus turned to military engineering, became technical adviser to Maurice of Nassau, and died as quartermaster-general of Holland. His scientific education was higher than Tartaglia's, but he first entered the University of Leyden as a man of thirty-five. Like all engineers of his period he was considerably nearer to manual labor than his modern

[24] On his youth, *Quesiti et Inventioni* VI, no. 8; "ten pennies (scudi)," *ibid.*, III, no. 10; "function concept," *ibid.*, I, no. 1 (cf. E. Zilsel: "The Genesis of the Concept of Physical Law," *The Philosophical Review*, LI [1942], 264); the worn-out cloak: *Travagliata Invenzione* (Venice, 1551), sig Fij v.

[25] 2nd ed. (Venice, 1554), fol. 4 r. In the dedication of his *Travagliata Inventione* (Venice, 1551), he claims the benefit of Venice as the purpose of his publication. His printer, Troiano, states in the dedication of Tartaglia's version of Euclid (Venice, 1565), that he published the posthumous manuscript "to benefit the world and to make illustrious this author's name" (Tartaglia's? Euclid's?). This is a nice compromise between the modes of speech of the humanists and the craftsmen.

[26] Advising gun-founders, *Ques. et Inv.*, I, no. 22 f.; military engineers (architects), *ibid.*, II, no. 9.

colleagues. Once he reports how he learned the technical terms of his profession from dikers, carpenters, masons, and metal workers.[27] He introduced decimal fractions and the parallelogram of forces and first stated the condition of equilibrium on the inclined plane.

Stevinus had the same utilitarian and "progressive" concept of science as Tartaglia. This becomes evident in the preface to his collected papers on applied mathematics, published at the same time in the Dutch original (*Wiscontighe Ghedaechtnissen*) and in Latin and French versions (*Hypomnemata mathematica, Mémoirs Mathématiques,* 1605–1608). Here Stevinus states that he has published the papers in order to make possible "the correction of his errors and the addition of other new inventions profitable to the public." He adds two other motives. Through publication he also wants to forestall plagiarists and to further the use of the mother-tongue in the scientific literature of the great nations.[28]

Stevinus also advocates scientific coöperation. He points out that at present experiments are lacking, "which are the solid basis on which the arts must be built. For this experience, however, the joint effort and the work of many people are required." As an example he cites astronomy. One man cannot carry out the necessary observations day and night for years, whereas if several observers collaborate, "the error or negligence of the one is compensated by the accuracy of the other." Observations of one observer, however good they may be, are always open to doubt and

[27] *Hypomnemata Mathematica,* I, 41 (*Oeuvres Mathém.,* ed. Girard [Leyden, 1634], II, 126). On Stevinus cf. George Sarton, *Isis,* 21 (1934), 241–262.

[28] Stevinus states (*loc. cit.*) that, without use of the mother-tongue, "the arts and sciences can not reach the perfection of the learned century." He believes in the existence of a pre-Greek "learned century" in which science flourished because it was based on experience rather than on belief in authority (*Hyp. Math.,* I, 11 f.; ed. Girard, II, 106 ff.). Only scanty remnants of this golden age are, according to Stevinus, extant in the Hermetic literature, but it can be awakened to new life "since human ingenuity has by no means diminished." Stevinus is convinced that science can and must be steadily improved. He is still ignorant, however, of the progressive interpretation of history and places the golden age of science in the past. Naturally Stevinus did not invent the "learned century" himself; he rather refers for its existence to his scholarly friends, the jurist Hugo Grotius the Elder, and the humanist Joseph Justus Scaliger. From them he also must have picked up the strange esteem of Hermes Trismegistus. His own scientific analyses are strictly mechanistic and entirely free from any influence of occult science—in contrast to nearly all learned natural philosophers of the period.

cannot be accepted as the basis for a theory by other astronomers. Only observations of various observers, if they agree well, can be relied upon. This applies to the observations of the Landgrave William of Hessen and Tycho Brahe. Many observers at many places are required also because the sky is sometimes overcast at one place. There may arise rivalry among the observers, each striving to make his observations best; "but only great advancement for the arts proceeds from this, though ambition also has its pitfalls." And what is true for astronomy is true for all sciences: science, concludes Stevinus, "requires the joint efforts of many people." This is the first detailed exposition of the necessity of scientific coöperation.[29] Tycho Brahe (d. 1591), and Wilhelm IV of Hessen (d. 1592), here mentioned, were the first in Europe to employ a staff of assistants at their observatories in Denmark and Prague and at Cassel respectively. It is significant that Stevinus can give only astronomical examples although his exposition applies generally; it will be remembered that a certain amount of coöperation had been traditional in astronomy since antiquity. Yet Stevinus' appeal for the advancement of knowledge and cooperation is undoubtedly inspired by rising modern technology and its requirements.

The founder of modern surgery, Ambroise Paré (chronologically between Tartaglia and Stevinus, 1509–90) had a somewhat similar social position to Stevinus. In sixteenth-century Paris there were four groups of medical men: the academically trained medical doctors who wrote in Latin and did not do manual work like operating and dissecting; the "surgeons of the long robe," organized in the *Collège de Saint-Côme;* the corporation of the "barber-surgeons"; and the quacks who practiced illegally without belonging to any guild. The Collège of Saint-Côme had been founded in the fourteenth century as a corporation of artisans but had in the course of time successfully assimilated itself to the corporation of the doctors, demanding knowledge of Latin from its members and giving up any real medical work. The barber-surgeons remained artisans; they had shops and did shaving, leeching, venesection, and operating. Yet their corporation took care to transmit, under supervision of the doctors and the surgeons of the long robe, a certain amount of anatomical knowledge to the apprentices. Paré, the son of a maker of strong boxes, was as a

[29] *Hyp. Math.*, I, 17 f. (ed. Girard II, 111 f.).

youth such an apprentice. In his twenties he worked as a kind of surgical intern at the only Paris hospital, and in the field as a military surgeon. Returned to Paris, he became a master in the guild of the barber-surgeons, and with the help of aristocratic protectors whose favor he had gained in the field, he was also admitted to the corporation of the surgeons of the long robe. He died as Surgeon to the King. In his works, all written in French, his connection with handicraft is conspicuous. He frequently scoffs at doctors "cackling in chairs" and "turning over the leaves of books"; he is proud of the manual work in surgery and emphasizes that he has not learned Latin. Yet he has gained from translations a very considerable knowledge of the classical medical literature. Socially he can be compared to Stevinus or the map-maker Ortelius: he was a superior artisan who through his thirst for knowledge ascended to scholarship and entered the service of a prince. Paré invented entirely new methods in the treatment of fractures and in obstetrics, and introduced the binding of arteries to stop bleeding in operations; previously wounds had been burned with boiling oil. Paré's emphasis on experience and originality, his opposition to classical authorities and the overestimation of words deserve an extensive discussion. We shall, however, restrict ourselves to his conception of scientific progress.

Paré wrote all his works for his young colleagues. In his first publication, *La méthode de traicter les playes* (1545), he addresses the preface "to the young surgeons of good will." He has published the treatise, as he states like Dürer seventeen years earlier, "to stimulate superior minds to write on this subject so that we may all have greater knowledge"; and he concludes with the wish that God to whose honor he is writing may ordain "that some fruit and benefit to the support of the weakness of human life" issue from his labor. His *Collected Works*, frequently reprinted, appeared first in 1575. In the preface Paré promises that he will give case histories "so that young surgeons may take courage to proceed as or, if they can, better than I do (for it is they to whom I address these writings rather than to the scholars)." And he affirms that he has not spent his life in idleness but working "for the republic, always seeking the advancement of the young apprentices of surgery to whom my writings are addressed." His interest in the training of his colleagues obviously derives from medieval craft ideals. Paré had however overcome any ideas of guild

secrecy. His colleagues had accused him of having with his publications given everybody the means of practicing surgery. To this reproach he replies that he "is extending the gifts given him by God liberally to everybody," wishing "that there may be no one who will not become through my writings much more skillful than I am"; he does not belong to those "who make a cabala of the arts." Thus he can widen his enthusiasm for his craft to the ideal of scientific progress. "The arts," he says, "are not yet so perfected that one cannot make any addition: they are perfected and polished in the course of time. It is sloth deserving blame to stop with the inventions of the first discoverers, only imitating them in the manner of lazy people without adding anything and without increasing the legacy left to us. . . . More things are left to be sought after than have been found." Paré explains this idea at length, cautiously but decidedly assailing the overestimation of classical medicine. God, he states, "did not give us judgment to let it rot and to stop at the first outlines of the art drawn by our ancestors." Usually Paré gives the public benefit, the benefit of France, the benefit of the patients, and the honor of God as his goals. He never speaks of glory and literary immortality, although as a good craftsman he is rather proud of his reputation and even of his earnings. He is the most outspoken advocate of scientific progress before Francis Bacon. His "progressive" statements, however, although they speak of "the arts" in general, relate only to surgery. Once he even complains that men are too much interested in astronomy, which in contrast to anatomy will never overcome the stage of mere conjectures.[29a]

5. We have studied a number of artisans, a highly instructed barber-surgeon, and two men with extensive mathematical knowledge, Tartaglia and Stevinus, who were close to the artisans. University graduates have not been discussed. In the sixteenth century, however, under the pressure of advancing technology the wall which since antiquity had separated the "liberal" from the "mechanical" arts began to crumble. In many countries, particularly in England, a few academically trained scholars began to be inter-

[29a] On the Paris surgeons and Paré's life, conf. Ambroise Paré: *Oeuvres*, ed. J. F. Malgaigne (Paris, 1840), Introduction; his interest in the training of his colleagues, *ibid.*, I, pp. CCCIV, 11 f., and 16; on guild secrecy, I, 12 and 14; on progress, I, 8 f.; on astronomy, I, 15.

ested in technological problems.[30] Their treatises are for the most part written in the vernacular, since they were intended to be used by navigators, gunners, surveyors, and craftsmen, or at least by their employers, the merchants, generals, and princes. It is often hard to determine who in sixteenth-century technological literature gives and who receives the ideas. Mathematical knowledge stems of course from the scholars. Actually the artisans mentioned above, Bourne and Norman, learned mathematics from the works of the scholars Recorde and Digges. On the other hand, the scholars were in the closest contact with manual workers, and several of them even earned their living, for a time or permanently, as instrument-makers. They shared of course the utilitarian concept of science with the artisans. Otherwise they would have written neither on technological subjects nor in the vernacular. In most of these works the humanist ideal of fame is no longer mentioned and it is expressly stated that the author published the book to benefit the public or his country.[31]

A few anti-individualistic and "progressive" remarks deserve a more extensive discussion. In 1532 the professor of mathematics at the University of Ingolstadt, Peter Apian, a contemporary of Tartaglia, published a Latin treatise on a measuring instrument of his invention for astronomers and surveyors. In the booklet is a vindication of invention which somewhat anticipates Baconian ideas. Those, Apian points out, "who reject the best things be-

[30] A list of authors in E. Zilsel: "The Sociological Roots of Science," *Amer. Journal of Sociol.*, XLVII (1942), 554 n.

[31] Luca Pacioli's *Summa de Arithmetica* (Venice, 1494), is probably the first book of a learned author to stress practical utility in the preface. The text discusses for the most part problems of commercial arithmetic and contains the first printed account of double-entry bookkeeping. Luca was a monk and mathematics professor at various Italian universities, but must have had close contacts with artist-engineers and merchants. Practical utility is also expressly emphasized: in Recorde's dedication of his textbook on algebra, *The Whetstone of Witte* (1557); in Thomas Digges' prefaces to his English treatises on applied geometry and measuring instruments (*Tectonicon*, 1556; *Pantometria*, 1571); in Jacques Besson's works on measuring instruments and machines (*Le Cosmolabe*, 1567; *Theatrum Instrumentorum et Machinarum*, 1569); in John Dee's preface to Billingsley's English version of Euclid (1570); in Thomas Hood's inaugural address as mathematical lecturer of the City of London (1588, edited by Francis R. Johnson, *Journal of the History of Ideas*, III, 1942, 94 ff.). All these authors were academically trained. Most of them combine utilitarian with humanistic, Pacioli and Recorde also with scholastic ideas.

cause they are new, err, for without new inventions life would return to the state of the ancients who lived lawless and uncivilized like beasts." Countless still hidden astronomical facts could be brought to light if only we did not fail in our zeal for investigation. The author states that, though an admirer of classical antiquity, he does not despise the present; he rather is convinced that Nature is not yet tired and effete and is still able to produce praiseworthy things. In the following year Apian published an enlarged version of the booklet in German since, as he states, he often found better mathematical understanding among laymen than scholars. Here he affirms that he has invented his quadrant "to benefit the whole of Christianity and almost the whole world." He also promises further treatises on measuring instruments since, "as the proverb states, I am not born to myself alone but also to those with and after me."[32] Professor Apian (1495–1522) was a skillful mechanic. After his graduation from the University of Leipzig he made his living for several years as a maker of globes and measuring instruments. As a young and badly paid mathematics professor at Ingolstadt he ran at the same time a printer's shop. Later he became astronomy teacher to Charles V and was knighted for a mechanical planetarium.

In 1570 the Dutchman Abraham Ortelius made a not unimportant contribution to the development of scientific method in his atlas, *Theatrum Orbis Terrarum*. Ortelius wanted, as the preface states, to benefit the students of geography rather than to aspire for fame through the works of others. He therefore gave a list of about eighty cartographers and maps used in his book. The writings of the scholastics and humanists abound with references to previous authors. Yet the list of Ortelius is the first extensive bibliography in modern scientific literature. Although bibliographical lists are not the cornerstone in the building of science

[32] *Quadrans Astronomicus* (Ingolstadt, 1532), dedication. *Instrument Buch* (*ibid.*, 1533), dedication and part 5.—Apian's polemic against overestimating antiquity is manifestly inspired by Pico della Mirandola. The passage on Nature which is not yet effete is an almost literal allusion to Pliny the Younger, *ep.* VI, 2. This passage was often quoted by Giovanni Pico della Mirandola, his nephew Giovanni Francesco, and other precursors of the *querelle des anciens et des modernes* that developed in the following century. Cf. E. Zilsel, *Entstehung des Geniebegriffs*, 215, 302, 305. On Apian's life, cf. *Allgemeine Deutsche Biographie*, and "Die Apianus Druckerei in Ingolstadt" in *Veröffentlichungen der Gutenberggesellschaft*, Mainz, XXI (1930), 59–82.

they too manifest the modern idea of scientific coöperation. Ortelius (1527–98) was a map-maker, a dealer in maps and antiquities, and became imperial geographer to Charles V. In his youth he had been, together with the engravers, painters, and the renowned Antwerp pianomakers, a member of the St. Luke guild in Antwerp. He was, however, not an ordinary craftsman but an erudite classical scholar despite his lack of academic training.[33]

In 1595 Ortelius' friend, Gerard Mercator, stated in his *Atlas* that in the composition and arrangement of his work he kept his eye on the benefit of the republic; "we are not born to ourselves alone but the Creator ordered us to live for the common weal." Mercator (1512–94) studied at the University of Louvain, but entered a geographer's office in Antwerp after his graduation. These offices composed itineraries for merchants since reliable maps were rare, and procured heads of caravans. Often they also made maps and nautical instruments. Later Mercator established his own workshop and became the best instrument-maker, surveyor, and map-maker of the century. The editor of the later editions of Mercator's *Atlas,* the cartographer Hond, also emphasized the utilitarian viewpoint. He expressly demands that authors endeavor to benefit the republic and posterity, and blames those who "sing only for themselves and the Muses."[34]

The progress of knowledge was proclaimed as a controlling scientific and philosophical program by Francis Bacon (*Advancement of Learning,* 1605; *Novum Organum,* 1620; *De Augmentis Scientiarum,* 1623). Bacon emphasizes also the importance of scientific coöperation. In his *New Atlantis* (1627) he describes an ideal state ruled by a body of scientists organized, according to the principle of division of labor, in nine groups. Technological and physical laboratories and agricultural stations are at the disposal of the scientists. Such institutes for research were unknown in Bacon's lifetime. There existed only observatories, which of course were not affiliated with the universities but were establishments of rich scholars (Tycho Brahe) or princes (William IV of Hessen, emperor Rudolph II). Bacon's scientific ideas were in

[33] Cf. *Biogr. Nat. Belg.*

[34] Mercator's remark in the introduction to the maps of France (4th edition of the *Atlas* [Antwerp, 1630], 121). Hond's remark in the preface, *ibid.* The editor of the smaller edition, Petrus Montanus, also stressed the public benefit (*Atlas Minor* [Antwerp, 1607], pref.). On Mercator's life cf. *Biogr. Nat. Belg.*

marked contrast to the program of the contemporary universities; he himself set up the "mechanical" arts as a model for the scientist.

Bacon's ideas have been so often set forth that another discussion would be superfluous. It has however not been noted that his idea of progress through coöperation appeared before him in the sixteenth-century literature on applied mathematics, navigation, and cartography. The question of Bacon's literary sources is of minor importance. Since he was not interested in mathematics and quantitative investigation he probably did not read treatises on measuring instruments. On the other hand, it seems improbable that a scholar at the court of Queen Elizabeth, where so much was done for the promotion of navigation, should not at least have been in touch with the scientific tradition of Recorde, Digges, and John Dee. These however are merely biographical questions. What really matters is the sociological origin of Bacon's ideas. Bacon and Stevinus did not know each other. Yet Stevinus' plea for scientific coöperation appeared a few years before the *New Atlantis*. And Tartaglia and Robert Norman, Apian and Mercator held utilitarian views on science and deliberately worked for the gradual advancement of knowledge, whether Bacon knew their books or not.

Manifestly, the idea of science we usually regard as "Baconian" is rooted in the requirements of early capitalistic economy and technology; its rudiments appear first in treatises of fifteenth-century craftsmen. However, it makes a considerable difference whether notions are advanced in prefaces and casual remarks or whether they are presented as a philosophical platform to revolutionize the whole of science. Bacon used the ideas of his "predecessors" as a battering ram against scholasticism and humanism and was the first to develop their philosophical and cultural implications. The concept of scientific progress was known before him, the ideal of the progress of civilization begins only with Bacon. On the other hand, Bacon fell considerably behind the military engineers and cartographers in the understanding of scientific particulars.[35]

[35] In Campanella's utopia, *Civitas Solis* (composed in 1602, published in 1623) there are public museums but no institutions for research. Scientific progress and coöperation are not mentioned. They are not mentioned either in Campanella's interesting account of his scientific aims, *De libris propriis et recta ratione studendi*

Perhaps the clearest statement of the ideas the genesis of which we have been considering, is found eleven years after Bacon's death in the Cartesian *Discourse on Method* (1637).[36] In his matter-of-fact style Descartes here explains why he has published "the little that he has found." He wants, as he puts it, "to induce intelligent men to try to advance farther by contributing, each according to his inclination and ability, to the necessary experiments and by also publishing all their findings. Thus the last would start where their predecessors had stopped and, by joining the lives and the work of many people, we would all proceed much farther together than each would have done by himself." Manifestly this procedure, advocated by Albrecht Dürer a hundred and fifty years before, was not yet a matter of course in the Cartesian period.. It is noteworthy that this passage is not a casual remark. It concludes a lengthy explanation of the author's reluctance to communicate his ideas to the public. Descartes states that he would never have published his ideas so long as they concerned only the "speculative sciences"; when, however, he saw that his new method would revolutionize physics also, he considered its concealment a violation of the law enjoining furtherance of the common weal upon us. With the help of this method, he adds, we shall understand the actions of fire, water, and all other bodies "as distinctly as we understand the various trades of our artisans, and by application of this knowledge to any use to which it is adapted we could make ourselves masters and possessors of nature." Wherever in the seventeenth century the idea of scientific progress through coöperation appears, the application of science to technology is also emphasized. The modern textbooks on the history of philosophy often disregard these Baconian traits in Descartes.

The further development of the concepts of progress and scientific coöperation is familiar. Soon after Bacon's death his program was put into effect, to a large extent under the direct influ-

syntagma (composed in 1632, published in 1642; ed. Spampanato, Florence, 1927), where they would have been discussed if Campanella had known these ideas. In Johann Valentin Andreae's utopia *Christianopolis* (Strassburg, 1619, tr. F. E. Held, New York, 1916) there is a library, an anatomical theatre, a chemical and a physical laboratory, and an observatory. Andreae is, however, not interested in research but in education and does not mention scientific progress. He was a German protestant minister, a friend of Comenius, and a Rosicrucian.

[36] *Oeuvres* (Adam-Tannery), VI, 63.

ence of his writings, in scientific organizations and periodicals. The Academy of the Lynxes in Rome (1603–30), established while Bacon was still alive, owed nothing to his ideas. It had no laboratory and was nearer to the sixteenth-century "academies," which were actually aristocratic literary clubs, than to a modern scientific society. Yet the Lincei published a scientific work composed by several authors in collaboration, the *Nova plantarum, animalium, et mineralium Mexicanorum historia* (Rome, 1651). On the other hand, in the laboratories of the *Accademia del Cimento* in Florence (1657–67), the *Royal Society* (founded in 1660), and the *Académie des Sciences* in Paris (founded in 1666) scientists for the first time in history systematically collaborated. The progress of science through coöperation was the aim of these organizations. It is explained with particular clearness. in the introduction to the first issue of the *Philosophical Transactions* (1666), edited by the *Royal Society.* Here Oldenburg, the secretary of the Society, states that the new periodical is being published "to the end that such Productions being clearly and truly communicated, desires after solid and useful knowledge may be further entertained . . . and those, addicted to . . . such matters, may be invited and encouraged to search, try, and find out new things, impart their knowledge to one another, and contribute what they can to the Grand design of improving Natural knowledge. . . . All for the Glory of God, the Honour and Advantage of these Kingdoms, and the Universal Good of Mankind." Like Descartes, Oldenburg invites explorers to "contribute" their part to a common desig1 Knowledge is no longer the business of literati greedy for personal fame and disputing schoolmen: the modern Western concept of scientific research has been reached.[37]

[37] On the first scientific societies and periodicals, cf. primarily Martha Ornstein: *The Rôle of Scientific Societies in the Seventeenth Century,* 3rd ed. (Chicago, 1938). Recent additions in: Harcourt Brown: *Scientific Organizations in 17th Century France* (Baltimore, 1934), and "Martin Fogel e l'idea Accademica Lincea," *Reale Accad. Naz. dei Lincei, Scienze Morali, Rendiconti,* VI/11, (1935), 814 ff.; Giuseppe Gabrielli: "Il Carteggio Linceo," *ibid., Mem.,* VI/1 (1925), 137 ff. and VI/7 (1938/39), 1 ff., and "Le Schede Fogeliane," *ibid., Rendiconti,* VI/15 (1939) 141 ff.; Francis R. Johnson: "Gresham College, Precursor of the Royal Society," *Journal of the History of Ideas,* I (1940), 413 ff. Michele Maylender: *Storia delle Accademie d'Italia,* 5 vols. (Bologna, 1926); Robert Merton: "Science and Technology in the 17th Century," *Osiris,* IV (1938), 360 ff. (on the Royal Society). A sociological analysis of the precursors of the modern scientific organizations and of the first books composed by several authors in collaboration will be published elsewhere.

We have tried to show that this concept made its first appearance in the intellectual attitude of superior artisans. In classical literature similar ideas appear in the treatise of a maker of war-machines. In antiquity, however, they were not taken over by scholars; in early modern capitalism they were. It would be interesting to investigate the Arabic, Persian, Indian, and Chinese literatures. It is not impossible that in these cultures also superior artisans advocated in technological treatises the gradual progress of craftsmanship—if they wrote any. Such ideas were certainly not adopted and developed by the oriental scholars, theologians, and literati. The absence of slavery, the existence of machinery, the capitalistic spirit of enterprise and economic rationality seem to be prerequisites without which the ideal of scientific progress cannot unfold.

NOTES AND DOCUMENTS

THOMAS HOBBES AND THUCYDIDES

By Richard Schlatter

Thomas Hobbes began his career of scholar, man of letters, and philosopher by translating Thucydides. Why did he choose Thucydides? How successful was his translation? In what way did his careful study of the historian affect his own thought?[1] The answer to the last question is especially interesting: *The History of the Peloponnesian War* apparently crystallized for Hobbes many of the ideas fundamental in his later political philosophy.

In translating and studying Thucydides Hobbes was carrying on the Renaissance tradition of turning to the Greek and Roman historians with the expectation of learning how to solve the problems of modern polities. The first known Latin translation of Thucydides was made by Lorenzo Valla about 1452, and his preface pointed to the usefulness of true history.[2]

Bishop Seyssel of Marseilles, afterwards Archbishop of Turin, was the first to put the *History of the Peloponnesian War* into a modern language. Using Valla's faulty Latin version he made an even more inaccurate French version.[3] Nevertheless, the Bishop's French made good reading.

Seyssel too, in the fashion of his day, valued Thucydides most for his political teachings. In his prologue he records that this is one of the translations he has done for the use of Louis XII who has found in the ancient historians useful lessons for a modern monarch; and Thucydides is the best of them all for this purpose.[4]

[1] Ferdinand Tönnies, *Thomas Hobbes*, 3rd ed. (Stuttgart, 1925), refers to a work by Arturo Bersano, *Per le fonti di Hobbes* (Bologna, 1908), emphasizing Hobbes' debt to Thucydides. I have been unable to find this work in the United States or England.

[2] I have used the edition in the Harvard College Library which was probably printed at Venice about 1485 (Hain-Cop. *15511). Valla's version was reprinted at Cologne in 1543 by Konrad Heresbach. The *Editio Princeps* of Thucydides was printed by Aldus in 1502.

[3] Henri Estienne said of it: "ut Valla plerumque divinum potius quam interpretem Thucydidis egerat, ita hic episcopus vicissim Vallae sensum divinabat potius quam interpretabatur." Estienne printed a revised version of Valla's Latin together with the Greek text and his introduction examines the errors of both Valla and Seyssel; this edition, a folio, was printed at Paris in 1564. The passage occurs in this introduction (*iii^b).

[4] The Bishop's translation was printed in 1527 by command of Francis I. "au prouffit et edification de la noblesse et subiects de son Royaulme." A preface by the poet and Royal Secretary, Jacques Colin, emphasized again the importance of the

In the half-century after Seyssel's edition Thucydides was translated and retranslated into several modern languages[5] and Thomas Hobbes was, consequently, working in a well established tradition when he began his translation in the 1620's. In fact, as Hobbes knew, an English version already existed. In 1550, Thomas Nicolls, a former Cambridge scholar, and then a barrister, published *The hystory writtone by Thucydides the Athenyan of the warre, whiche was betwene the Peloponesians and the Athenyans, translated oute of Frenche in to the Englysh language by Thomas Nicolls Citezeine and Goldesmyth of London. Imprinted the XXV. day of July in the yeare of oure Lorde God a Thousande, fyve hundredde and fyftye.* So for seventy-five years before Hobbes' edition, Englishmen had been able to read an English Thucydides translated from the French of Seyssel which in turn had been taken from the Latin translation of Valla. No doubt Hobbes was right in saying that Thucydides had been traduced rather than translated into English. Nicolls was sometimes careless as when in his description of the plague he mistook "puys" for "pays" and translated it "countrey," or read "cave" for "eaue" (eau) and translated it "cave." Sometimes he was betrayed by the simple lack of an English equivalent, a lack which later translators supplied by coining new words, thereby enriching our language and our thinking. For example, when Nicolls read "patrie" he could find no corresponding English word: English patriotism was developing rapidly but in the days of Edward VI it still had no word to connote both the nation and the feeling which a loyal citizen had for it. Seventy-five years later, Hobbes could use "countrey" where Nicolls could do no better than "patrie."[6]

Nevertheless Nicolls succeeded in making a book which conveyed the meaning of Thucydides after a fashion; and he wrote at a time when the English language, whatever its inadequacies as a vehicle of classical thought, had a freshness and immediacy of its own which the more scholarly English of later ages often lacked.

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study of history for rulers and noblemen and recommended Thucydides as the best of historians. *L'Histoire de Thucydide Athenien, de la guerre, qui fut entre les Peloponnesiens et Atheniens* (*Paris, 1527*). A second edition, claiming to be corrected by the Greek text, was published in 1559. Seyssel said he had been aided in his work by the famous scholar Jean Lascaris.

[5] An Italian translation by Francesco di Soldo Strozzi of Florence, dedicated to Cosimo de' Medici, was published in Venice in 1545, with a second edition in 1550; a Spanish translation by "el Secretario Diego Gracian" was printed at Salamanca in 1564; William Smith, in the *Preface* to his translation published in London in 1753, refers to a German translation of 1533 (not listed in Panzer or the British Museum Catalogue); a second French translation was published at Leyden in 1600 by Louis Jaussaud who used the revised Greek and Latin text of Estienne.

[6] In the Funeral Oration and in the Melian Dialogue. The N.E.D. gives 1566 as the date when "country" was first used in the sense of "fatherland."

Even on the score of accuracy, Nicolls does not deserve total condemnation except insofar as the French text he used was itself corrupt. For Nicolls belonged to the school of translators presided over by Sir John Cheke who emphasized the virtues of literal accuracy. In a letter to Cheke, printed as an introduction to the *History*, Nicolls says he has attempted to translate plainly and truly and requests Cheke to make corrections from the Greek text. In dedicating his work to Cheke, the tutor of Edward VI, Nicolls may well have had in mind the use which might be made of it in educating the young king. At any rate, he took care to translate and print the prologues of Seyssel and Colin where it was said that Louis XII and Francis I had found practical lessons in the historian.

If Nicolls' work was unsatisfactory, he could have said in its defense that competent scholars scorned translations and that it was his version or none. For even as late as 1550, just as conservative priests feared that the Church would be vulgarized if the Bible were translated, and aristocratic rulers feared that governments would become popular if parliaments inquired into the mysteries of state, so conservative scholars feared that the temple of learning would be profaned if the classics were translated. But in England the tide was slowly beginning to flow in the direction of popular religion, popular government, and popular literature. In the generation after Nicolls', translation became a respectable art, a host of translators turned the classics of Greece and Rome into classics of English literature, and a few years later produced the greatest monument of English prose, the King James Bible.[7]

Consequently, when Thomas Hobbes decided to translate Thucydides, he was deciding to carry on a respected and living tradition of thought and language. His predecessors had not doubted that they were enriching English literature, and improving the morals and minds of their countrymen. To their imaginations the classics were as living and pertinent as contemporary literature and the translator was doing a great and even patriotic job in presenting them to his fellow citizens. Philemon Holland wrote in the preface of his version of Pliny, published in 1600, that the few old-fashioned scholars who still objected to translations "thinke not so honourably of their native countrey and mother tongue as they ought."[8]

By the time Hobbes turned to Greek and Roman history many transla-

[7] See F. O. Matthiessen, *Translation, an Elizabethan Art* (Cambridge, Mass., 1931), and the works cited there for the story of translation in England after 1550. C. H. Conley, *The First English Translators* (Yale, 1927), shows Nicolls as one of the group of young protestants whose translations were frowned on by the Universities and by conservative Catholic scholars, clergymen, and statesmen. During the reaction under Mary almost no translations were published.

[8] Matthiessen, *op. cit.*, 179.

tions had already appeared.[9] He knew of Nicolls' translation and in his preface stated his opinion that a new English version made directly from the revised Greek text of his own day was needed to replace the old English version taken at three removes from the imperfect Greek text of Valla's day. He also said that the reader of Thucydides needs maps and his was the first edition to supply them.

Even if Nicolls had not been inaccurate, Hobbes might still have thought him insufficient: the English language itself had developed so rapidly between 1550 and 1625 that Nicolls' book was entirely out of date, just as a century later Hobbes was considered out of date, though not yet inaccurate. In 1753, the Rev. William Smith wrote in the preface of his translation of Thucydides:

> Mr. Hobbes, however sorry and mischievous a philosopher, was undoubtedly a very learned man. He hath shewn it beyond dispute in his translation of Thucydides . . . [but] he cannot now be read with any competent degree of pleasure. He is faithful, but most servilely so, to the letter of his author. . . . Too scrupulous an attachment to the letter of the original hath made the copy quite flat and heavy, the spirit is evaporated, the lofty and majestic air hath intirely disappeared. Too many low and vulgar expressions are used, which Thucydides ever studiously avoided. Such frequently occur in the midst of some grand circumstance, which they throw into a kind of burlesque, and may excite a reader's laughter. The English language hath gone through a great variation, hath been highly polished, since Mr. Hobbes wrote. Hence, tho' his terms be in general very intelligible, yet they have not that neatness, precision, and dignity, to which the polite and refined writers within the last century have habituated our ears.[10]

In any case, a large part of Hobbes' task was to make a modern as well as an accurate translation to replace that of Nicolls. Because he had the fortune to be writing in a period when the tradition of English writing and translating was good, Hobbes was able to modernize without denaturing, without losing the sense of life and pertinence which Nicolls had captured. A few sentences from their descriptions of the Plague are proof that Hobbes

[9] For example, Henry Savile, *Tacitus* (1592); North, *Plutarch* (1579); Holland *Livy* (1600), *Suetonius* (1606), *Ammianus Marcellinus* (1609); Rich, *Herodotus* (1584); Watson, *Polybius* (1568); Heywood, *Sallust* (1608).

[10] An example of Smith's refinement occurs in I, 8: he writes, "the combatants engage with scarfs round their loins" where Hobbes had written, "the combattants, about their privie parts, weare breeches." A fourth edition of Hobbes' work was printed in 1822 and in 1829. Rev. S. T. Bloomfield noted in the preface to his translation that Smith was out of fashion and Hobbes was again the preferred translation. Bloomfield, following the new fashion of his day, objected to the artificial diction of Smith which lacked the "native strength" of plain, idiomatic English.

Hobbes used the Greek and Latin text of Estienne as revised by Aemilius Portus and printed at Frankfort in 1594. For his accuracy see the notes to the edition by Sir William Molesworth, 2 vols. (London, 1843). The translation is said to have been revised by Ben Jonson and Sir Robert Ayton.

could correct and bring up to date and yet still translate in the great tradition which Nicolls had had a hand in creating.

NICOLLS

And to them, that were infected with other sickenes, yt tourned into this selfe same. And those, that were in full helth, founde thē soubdainly taken, without that, there was any cause precedinge, that might be knowin. And furste they felte a great heate in the hedde, whereby their eyes became redde and inflamed. And withinfourthe, their tongue and their throte, became all redde, & their breath became stinkynge and harshe. Whereupon, there ensued a continual neysinge and therof thair voice became hoerse. Anone after that, yt descended into the stomacke, whyche caused a greate coughe, that did righte sharpely payne them, and after that the matter came to the partes of the harte, it provokedde them to a vomyte. By meane whereof, wyth a peyne yet more vehemente, they avoyded by the mouthe, stynkinge and bitter humors. And wyth that, some dyd fall into a yeskynge, whereupon they came incontynently into a palsey, whyche passed from some forthwyth, and with othere endured longer. And althoughe, that, to touche and se them wythoute, and throughe the bodyes: they were not exceedinge hotte nor pale, but that their skynne was, as redde colour adusted, full of a lytle thynne blaynes: yet they feeled winfourthe so marvailous a heate, that they might not indure, one onely clothe of lynnen upon their fleshe, but they must of necessytie be all bare. . . . But the woorste that was in this, was that men loste their harte, & hope incontynently, as they feeled themself attaincted. In suche sort, that many, for despaire, holdinge themselves for dead, habandoned and forsoke thēself, & made no provisyon nor resistence againste the sickenes. And an other great evill was, that the malady was so cōtagious, that those, that went for to visitt the sicke, were taken and infected, lyke as the shepe be, one after an other. By occasyon whereof, many dyed for lacke of succours. Whereby it happened that many howses stoode voyde, and they that went to se theym, dyed also. And specially the most honnest & honorable people, whiche toke it for shame, not to go to se nor succour their parentes and their frendes. And loved better to putt and sett fourth themselfe to manyfest danger, than to faile them at thair necessitie.

HOBBES

If any man were sicke before, his disease turned to this; if not, yet suddenly, without any apparent cause preceding, and being in perfect health, they were taken first with an extreame ache in their heads, rednesse and inflammation of the eyes; and then inwardly, their throats and tongues, grew presently bloody, and their breath noysome, and unsavory. Upon this, followed a sneezing and hoarsenesse, and not long after, the paine, together with a mighty cough, came downe into the breast. And when once it was settled in the stomacke, it caused vomit, and with great torment came up all manner of bilious purgation that Physitians ever named. Most of them had also the Hickeyexe, which brought with it a strong convulsion, and in some ceased quickly, but in others was long before it gave over. Their bodies outwardly to the touch, were neither very hote nor pale, but reddish livid, and beflowred with little pimples and whelkes; but so burned inwardly, as not to endure any the lightest cloathes or linnen garment, to be upon them,

nor any thing but meere nakednesse. . . . But the greatest misery of all was, the deiection of mind, in such as found themselves beginning to be sicke (for they grew presently desperate, and gave themselves over without making any resistance) as also their dying thus like sheepe, infected by mutuall visitation; for the greatest mortality proceeded that way. For if men forbore to visite them, for feare; then they dyed forlorne, whereby many Families became empty, for want of such as should take care of them. If they forbore not, then they died themselves, and principally the honestest men. For out of shame, they would not spare themselves, but went in unto their friends.[11]

As in these passages, so throughout his translation Hobbes modernized the punctuation and spelling and substituted new words and new forms for Nicoll's obsolete ones. Where Nicolls expanded, Hobbes compressed. He shortened or omitted the elaborate connectives and used one word where Nicolls wrote doublets. "Putt and set fourth themselve," "honnest and honorable," "their parentes and their frendes," "lost harte and hope" became "went in unto," "honestest," "friends," "grew presently desperate." Nicolls elaborated and suggested more than he said; Hobbes pared down and strove for exact statement. Both versions are good reading, but Hobbes' terse directness may well have approached more nearly the simplicity and force of the original. In any case, if Hobbes had had no other purpose than to provide his generation with a readable version of a famous classic, his choice of Thucydides and his translation were both justified.

In choosing Thucydides, however, Hobbes may well have been responding to the changing historical taste of his contemporaries. For the humanists of the sixteenth century, who believed the classics of Greece and Rome should be read for their ethical values, Thucydides was not the ideal ancient historian. His reluctance to point a moral and his scepticism about the influence of ethical principles on human behavior must have disturbed the grave, moral scholars of Tudor England. Roger Ascham and his master, Sir John Cheke, did not recommend Thucydides as one of the necessary books for the good student who wanted to grow to a good man; Ascham preferred reading Livy.[12] The preference for Livy as a teacher of political virtues is implied in the preface to Holland's translation and even as late as 1625, Degory Wheare, Camden Reader of History at Oxford, gave his highest praise to Livy with particular mention of his fearless moral judgments.[13]

But the literature of the Jacobean Age is evidence that among some

[11] All references are to the 1st ed., London, 1629.

[12] See Matthiessen, *op. cit.*, 14, 55; Ascham, *Scholemaster*, Bk. 11 and *Report and Discourse of the Affairs of Germany*, both in vol. III of *The Whole Works* (London, 1864).

[13] *The Method and Order of Reading both Civil and Ecclesiastical Histories*, 2nd ed. (London, 1694), 86–9.

groups in England scepticism in the realm of faith and morals and a belief in self-interest as the dominant motive in human affairs were growing stronger; that Thucydides' popularity should increase at the same time is readily understood. Bacon could find in Thucydides grounds for making an unprovoked attack upon Spain.[14] He also considered the *History of the Peloponnesian War* the most perfect type of historical writing.[15] In the Second Book of the *Advancement of Learning* he states that the business of the historian is to describe events and allow the reader to draw his own conclusions from them; such a view of the historian's task would lead the critic to prefer Thucydides to Livy or any of the other classic historians.

Again in the Second Book of the *Advancement of Learning* Thucydides is mentioned as one of the historians worthy of being incorporated without alteration or omission into a Universal History. Thus it is entirely possible that Hobbes' translation is a part of Bacon's grand plan for collecting and digesting all knowledge as a preparation for its advancement. The tendency of recent scholarship has been to minimize Hobbes' debt to Bacon.[16] But the biographical evidence (given in Tönnies, *Thomas Hobbes*) and the obvious similarity of many of their political ideas—Hobbes probably made the Latin translation of the essay "Of the True Greatness of Kingdoms and Estates" which is the fullest statement of Bacon's mature political philosophy—indicate that Hobbes saw in Bacon a shrewd political thinker if not a great philosopher. And it was the political lessons they found in Thucydides which led both men to admire him.

In the dedication of his translation, Hobbes refers to the late Earl of Devonshire, his patron, as a reader of that which "best deserveth the pains and hours of great persons, history and civil knowledge." To the new Earl, his former pupil, Hobbes recommends the reading of Thucydides as "profitable instruction for noblemen and such as may come to have the managing of great and weighty actions," especially in the present age when the political virtues are so little understood. In short, Hobbes was continuing the tradition of reading the classic historians for the light which they threw on contemporary politics. What political lessons did he learn from Thucydides?

In the preface "To the Readers" he explains that Thucydides is the best of historians: "for the principal and proper work of history being to instruct and enable men by the knowledge of actions past to bear themselves prudently in the present and providently towards the future, there is not extant any other (merely human) that doth more fully and naturally perform it

[14] *Works*, ed. Spedding, Ellis, and Heath, XIV (London, 1874), 474.

[15] *Works*, IV (1870), 304–5.

[16] Leo Strauss, *The Political Philosophy of Hobbes* (Oxford, 1936), does emphasize Bacon's influence, but does not attach this to the *Essays*, from which Hobbes may well have taken many of his religious and political ideas.

then this of my author." In the text itself Hobbes makes a marginal note, "the use of this history," where Thucydides claimed that "he that desired to look into the truth of things done and which (according to the condition of humanity) may be done again, or at least their like, he shall find enough herein to make him think it profitable" (13).

In marking this passage by a marginal note, Hobbes was emphasizing a concept which was fundamental in his own thinking as well as in that of Thucydides. The idea of an unchanging human nature, the constant element in history, the common denominator which enables the historian to compare one event with another and construct a formula or pattern which is intelligible and useful, was a basic assumption of the science of history as Thucydides expounded it.[17] Hobbes devotes the first third of the *Leviathan* to a detailed description of human nature which served as the foundation for his political philosophy. Moreover, Hobbes found in Thucydides concrete examples of how human nature performs: the descriptions in the *Leviathan* of how men act read like generalizations from these examples.

In the beginning of the war, the Athenian ambassadors at Sparta defended their empire by claiming, as Hobbes interprets it, "that at first we were forced to advance our dominion to what it is out of the nature of the thing itself, as chiefly for fear, next for honor, and lastly for profit." They went on to argue that if "overcome by three of the greatest things, honor, fear, and profit, we have accepted the dominion delivered to us and refuse again to surrender it we have therein done nothing to be wondered at nor beside the manner of men." They have merely followed the "natural inclination of man" (41). In the *Leviathan* Hobbes observes that the three motives of human nature which led men to quarrel and to subdue one another are desire of profit, fear, and love of honor—the respect of the inferior for his superior: "so that in the nature of man, we find three principal causes of quarrel. First, competition; secondly, diffidence; thirdly, glory" (Pt. I, ch. 13). Of these three, fear was the cause of the Peloponnesian War (Hobbes marks Thucydides' statement of the fact by two marginal notes, pp. 14 and 46), and its absence—when men no longer feared human or divine punishment—was responsible for the anarchy of the time of the Plague. Both instances support the doctrine of the *Leviathan* that fear breeds war between nations and the lack of it breeds anarchy within nations.

Again, in the speech of the Athenian ambassadors at Sparta at the beginning of the war, Hobbes reads "it hath been ever a thing fixed for the weaker to be kept under by the stronger. . . . You now fall to allegation of equity, a thing which no man that had the occasion to achieve anything by strength ever so far preferred as to divert him from his profit" (41). Hobbes notes in the margin (175) that the Spartans in the course of the

[17] J. H. Finley, Jr., *Thucydides* (Cambridge, Mass., 1942), 108–10.

whole war never "esteemed of justice at all when it crossed their own interest or passion." Finally, in the Melian Dialogue, Hobbes reads the Athenian argument

> that in human disputation, justice is then only agreed on when the necessity is equal. Whereas they that have odds of power exact as much as they can and the weak yield to such conditions as they can get. . . . [We think] of men, that for certain, by necessity of nature, they will everywhere reign over such as they be too strong for. Neither did we make this law, nor are we the first that use it made, but as we found it, and shall leave it to posterity forever, so also we use it. Knowing that you likewise, and others that should have the same power which we have, would do the same" (341, 344).

In the preface "Of the Life and History of Thucydides" Hobbes expresses his approval of the Athenian generals at Melos who refused to discuss the justice of their invasion—as soldiers their proper function was to carry out the will of the Athenian State by fair means or foul. As to whether the action of the state was just in this case, Hobbes puts aside the question with the observation that it "was not unlike to divers other actions that the people of Athens openly took upon them."

Thus the judgment of history and the opinions of Athenian statesmen supported Hobbes' contention that by the law of nature the strong should rule the weak, and that justice is an empty word in international relations or wherever here is no sovereign power (*Leviathan*, Pt. I, ch. 13). The revolution in Corcyra was, of course, an excellent example of a time when particular men lived in a state of war and the same chapter of the *Leviathan* referred to periods of civil war as typical of the state of nature.

The *Leviathan* goes on to explain in a famous chapter that political liberty and freedom are no more than the power of the independent, sovereign state to wage successful war against its enemies. Athens is cited as an illustration: the Athenians were free, although they had not the liberty of refusing to obey their government, because their government could resist or invade other peoples (Pt. II, ch. 21). The translation of Thucydides had already anticipated this view: the Boeotian commander Pagondas says, "For liberty with all men is nothing else but to be a match for the cities that are their neighbors," and Hobbes notes in the margin, "So that so soon as a state hath a neighbor strong enough to subdue it, it is no more to be thought a free state" (262).

Without doubt, Hobbes found in Thucydides' descriptions of the nature of men and the motives which lead them to act a great deal that he himself accepted as true. But for both men the analysis of human nature was only a part of the solution of a problem which they had set themselves; given the nature of man, how can the good society be set up and kept going? Thucydides had seen the good society in Periclean Athens and his history can be taken as a record and analysis of its decline. Hobbes apparently

found the good society in Jacobean and Stuart England and he saw with prophetic eye that it needed to learn the lessons of history—particularly from Thucydides—if it too was not to decline.[18] Thucydides offered no solution to his problem, but he did make clear that the cause of Athens' downfall was political disunity at home, faction and rebellion. Perhaps he was sceptical of any ideal solution: he stated that the horrors of the revolution in Corcyra "have been before and shall be ever as long as human nature is the same." But when Hobbes translated that phrase he was already thinking of his ideal solution of the problem. He accepted the opinion that the problem was one of political unity; and he found in Thucydides' magnificent history the outlines of his answer.

In the preface "Of the Life and History of Thucydides" Hobbes writes,

> For his opinion touching the government of the state it is manifest that he least of all liked the democracy. And upon divers occasions he noteth the emulation and contention of the demagogues for reputation and glory of wit; with their crossing of each others counsels to the damage of the public; the inconstancy of resolutions caused by the diversity of ends, and power of rhetoric in the orators; and the desperate actions undertaken upon the flattering advice of such as desired to attain, or to hold what they had attained of authority and sway amongst the common people.

Here was another reason for Hobbes to prefer Thucydides among the classics and to translate him as a political textbook for his contemporaries. *The History of the Peloponnesian War* was a necessary antidote to the poison of ancient political theory: the *Leviathan* complains that men have adopted the political opinions of Aristotle, Cicero, and other classical writers whose false notions of democracy and liberty lead directly to sedition and rebellion. "I think I may truly say there was never anything so dearly bought as these western parts have bought the learning of the Greek and Latin tongues" (Pt. II, ch. 21). In *Behemoth* Hobbes cites as the ultimate cause of the Civil Wars the teaching in the Universities of political theory taken from Aristotle, Plato, Cicero, Seneca, and the classical historians.[19]

Hobbes continues his discussion of the historian's politics by remarking, "Nor doth it appear that he magnifieth any where the authority of the few, amongst whom he saith every one desireth to be chief, and they that are undervalued beare it with less patience than in a democracy; whereupon sedition followeth, and the dissolution of the government." A note in the margin of the text reads: "Ambition of the oligarchicals amongst themselves overthroweth their government" (521). Here again Hobbes has found in

[18] For an account of Hobbes' views of contemporary politics, see Julius Lips, *Die Stellung des Thomas Hobbes zu den Politischen Parteien der Grossen Englischen Revolution* (Leipzig, 1927).

[19] *Behemoth* (London, 1680), 31, 57, 74. In the *Leviathan*, Pt. II, ch. 25, Hobbes states that democracy is workable only in special circumstances; the circumstances he cites are obviously derived from Thucydides.

Thucydides an opinion which he himself maintained in his later works; an aristocracy is perhaps better than a democracy but is still liable to break up into warring factions.[20]

The summary of Thucydides' politics concludes: "He praiseth the government of Athens when it was mixed of the few and the many; but more he commendeth it, both when Pisistratus reigned (saving that it was an usurped power) and when in the beginning of this war it was democratical in name, but in effect monarchical under Pericles. So that it seemeth that as he was of regal descent, so he best approved of the regal government." In the text of the *History* the statement that Athens under Pericles had in fact a government of one man is italicized by Hobbes.

The matured political theory of Hobbes, of course, denied the possibility of "mixed government:" did he then arrive at this opinion sometime after his translation had been published? The text of the translation itself provides some evidence that Hobbes did not regard the government of the Five Thousand as a "mixed government" in the sense that the sovereign power was divided. He translates: "The Athenians . . . called an Assembly . . . in which, having deposed the Four Hundred, they decreed the Sovereignty to the Five Thousand" (528). But if the Five Thousand had the sovereignty (later translators do not use this word here—Crawley writes "government") then according to Hobbes' later thinking the government was not mixed, but a simple aristocracy. In fact, the creation of the aristocracy of the Five Thousand by the Athenian people is a perfect illustration from history of Hobbes' later description of how a true, unmixed, aristocratic government is instituted: the people come together and agree to give the sovereignty by majority vote to a particular group of men. Because he chose to use in this passage the word "sovereignty"—a word so central in all his political thinking—we may surmise that Hobbes read here no more than a praise of a particular aristocratic government which, unlike the aristocracy of the Four Hundred, was properly instituted by the whole people and ruled well; if he calls it "mixed" that is a paraphrase of Thucydides and not his own opinion. If the surmise is correct, Hobbes found nothing here to conflict with his later political thinking.

In any case, his reading into the *History* a preference for monarchy is clear evidence that Hobbes himself, whatever Thucydides may have in fact preferred, had already thought out his solution of the political problem—government by one man. The objection that the power of Pisistratus was usurped does not indicate that Hobbes' opinion of legitimacy was not yet fully developed. In the first place, he was here again paraphrasing what

[20] *Elements of the Law* (Cambridge, 1928), Pt. II, ch. 5. Hobbes notes here that the Venetians have improved the Greek and Roman model of aristocracy (*Leviathan*, Pt. II, ch. XIX). *Behemoth*, 219, observes that the Rump might have ruled England successfully if the members had had more honesty and wit.

he took to be the opinion of Thucydides; secondly, the idea of legitimacy implied here is not in any way inconsistent with the doctrine of the *Leviathan* which teaches very clearly how to institute legitimate governments and why rebellion and usurpation are crimes against the law of nature. That successful usurpers may become legitimate monarchs does not make usurpation good.

In fact, Thucydides' account of the tyrants of Greece seems to have provided Hobbes with one of his principal arguments in favor of absolute monarchy and in opposition to classical political theories. His translation of the passage in the *History* defines tyranny as an unlimited monarchy as distinguished from the older Greek "kingdoms with honors limited"; the latter were "hereditary," which suggests that the succession was settled by law while in the tyrannies the sovereign had the power to name his successor. Hobbes writes in the margin beside this passage, "The difference between tyranny and regal authority" (9). Thus the tyrant of Thucydides appears to be identical with the ideal monarch of Hobbes—an unlimited sovereign whose powers include that of naming his own successor. In the *Leviathan* Hobbes states explicitly that his ideal monarchy is not hereditary and that his ideal monarch choses his own heir;[21] in the same place he points to the kingdom of Sparta—the older type of hereditary Greek kingdom as distinguished from the newer tyrannies—as an example of a government which was not a true monarchy (Pt. II, ch. 19). But if a tyrant is no other than the ideal monarch, the arguments of Aristotle and his successors against tyranny fall to the ground—tyrannicide is the same as regicide and consequently wrong. This argument, since it rests on the definition of words, is the kind that appealed to Hobbes and he used it more than once in combatting the opinion that rebellion is justified if the government is tyrannical (*Leviathan*, Pt. II, ch. 19, 29 and Pt. IV, ch. 46; *Behemoth*, 4, 31). The reading of the political theory of the ancients led to civil war and rebellion, but a proper reading of Thucydides would lead men to obey their sovereign —another reason for providing Englishmen with a good translation of the *History of the Peloponnesian War*.

Finally, Hobbes found in Thucydides an opinion of religion which fitted nicely his own religious beliefs. His preface relates that the historian belonged to the school of Anaxagoras "whose opinions, being of a strain above the apprehension of the vulgar, procured him the estimation of an atheist, which name they bestowed upon all men that thought not as they did of their ridiculous religion." Anaxagoras and his pupil Socrates, Hobbes says, were put to death as atheists, and some critics have fastened the name on

[21] Strauss is clearly wrong in saying, (59) "at all stages in his development Hobbes considered hereditary absolute monarchy as the best form of the state." In general, his discussion of Hobbes and Thucydides is less convincing than the other parts of his book.

Thucydides. In fact, Hobbes continues, Thucydides was not an atheist; he objected to superstition and he blamed Nicias for losing the war by being so punctilious in observing religious customs, but he also praised Nicias for his piety at other times. "So that in his writings our author appeareth to be on the one side not superstitious, on the other side not an atheist." Hobbes might have written all this of himself. He too was not an atheist; he despised superstition and regarded popular Christianity as ridiculous; his opinions got him the reputation of being an atheist and in 1666 he thought his life was being threatened on that account.

Thus it appears that Hobbes' reading of Thucydides confirmed for him, or perhaps crystallized for him, the broad outlines and many of the details of his own thought. As an individual, he was said to have read little but to have digested thoroughly what he did read. As a translator, he was working in a great tradition which assumed that classical history was to be read as a preparation for political action. When he turned to Thucydides—perhaps at the suggestion of Francis Bacon—he had been meditating on political affairs for some time. Parliament and King were debating fiercely about royal power, men were taking sides, and Hobbes, in his late thirties, must have already thought out some of the major premises which sustained his political philosophy consistently during the next forty years. Turning to Thucydides he found precisely the view of human nature and the state which he himself had been constructing. No doubt in his eagerness he strained the meaning of Thucydides at times; but the result was an example of the thing which happens when a great mind, on the verge of a great discovery, suddenly happens upon the book which crystallizes its ideas. Hobbes was henceforth saturated with Thucydides and cited examples from the *History* throughout his later works. When he wrote in his Latin verse autobiography that he had found Thucydides the best reading of all the classics and that he had translated him as a political lesson to his countrymen, the old philosopher was no doubt remembering accurately in spite of his eighty-four years.

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GOLDSMITH AND THE CHAIN OF BEING

By Winifred Lynskey

In the eighteenth century the metaphysical concept known as the "Chain of Being" came to its historical end. In his brilliant study, *The Great Chain of Being,* Mr. A. O. Lovejoy has traced the ramifications of the notion in the literature, philosophy, theology, and biology of the eighteenth century. He has included Bolingbroke, Pope, Addison, Thomson, Young, Akenside, and Johnson among the literary figures who reflect the interest in the idea. Notably absent from this list is Oliver Goldsmith, whose *History of the Earth and Animated Nature,* a popularization of natural history, is briefly dismissed by Mr. Lovejoy.[1] But Goldsmith's place is as important as that of Pope, who rhymed the philosophy of the concept, or of Johnson, who destroyed dialectically the logic of the chain. Goldsmith's chain of being is unique in the eighteenth century.

Goldsmith was completely aware of the philosophical implications of the chain. But he went beyond the theory. In his *Animated Nature* he actually created a living chain of being. His natural history is a scale of being descending steadily in small as well as in large details from the more perfect to the less perfect creatures. Here, in *Animated Nature,* creatures exist logically in the places assigned to them in the great hierarchy of forms. Here is the chain in objective as well as metaphysical reality. The lynx and the siagush, the whale and the cachalot, the ostrich and the humming bird, the beetle and the bee—the hundreds of creatures in Goldsmith's biological history are arranged in a steadily descending scale from man at the top to the zoöphyte at the bottom. In unbroken continuity the chain stands, intricately developed, sustained, and "linked" in an amazing practical application of the metaphysical principles of the chain. I know of no other writer of natural history in the eighteenth century—even including Buffon, the chief source of Goldsmith's natural history[2]—in whom the chain is presented both philosophically and literally.

[1] *The Great Chain of Being* (Cambridge, Mass., 1936), 231, 360, n. 24.

[2] Buffon's *Histoire Naturelle* was the chief, though not the sole, source of the first four volumes of *Animated Nature.* See James Hall Pitman, *Goldsmith's Animated Nature,* in *Yale Studies in English,* LXVI (New Haven, 1924), 37–46, 65–70, 78–85. See also A. L. Sells' *Les Sources Françaises de Goldsmith* (Paris, 1924), 179–82. Goldsmith knew Buffon early in his career. See Goldsmith's Introductions to R. Brookes, *A New and Accurate System of Natural History* (6 vols.; London, 1763) which reflect the ideas of Buffon. See also the introduction and footnotes in *New Essays by Oliver Goldsmith,* ed. R. S. Crane (Chicago, 1927). For a discussion of the chief scientific sources of *Animated Nature,* see my article, "The Scientific Sources of Goldsmith's *Animated Nature,*" *Studies in Philology,* XL (Jan., 1943), 33–57.

The principles which Goldsmith uses in constructing his chain of being are three:

1. *Fullness, continuity, gradation*—three interlinking ideas, without which the chain could not exist.

2. *Diminishing size as an indication of descending inferiority*—an arbitrary assumption which could easily work havoc with the metaphysical basis of the chain. The argument, however, is based upon the rational fullness and optimism of the chain. No class of creatures can be destroyed lest a "chasm" exist in the hierarchy of forms. Every class of creatures must be supplied with weapons for aggression and defense. Small, weak creatures seem to have been granted prolific propagation as a means of preservation. Hence the numerousness of a class of creatures is a clue to its imperfection, and since most small creatures are numerous, they are, in general, inferior and rank low in the chain. This is a bold assumption, but both Buffon and Goldsmith make it.[3]

3. *The relationship of a creature to man.*[4] In the system of both Buffon and Goldsmith, man has a proud position at the head of all created beings. All creatures ascend in the scale according to various relationships which they bear to man. Whether or not creatures are useful or obnoxious, domestic or savage; whether or not their anatomical conformation is similar or dissimilar to that of man—these relationships will determine the rank in the scale.

[3] Diminishing size, however, is a relative matter. The kingfisher outranks the whale, for the kingfisher belongs to a superior class, that of birds. Within the class of birds, the eagle outranks the kingfisher; and within the class of fish, the whale outranks the herring. Only within a given grouping is the superior creature the largest.

[4] This principle is not a principle of the chain at all, according to Mr. Lovejoy, who believes that the philosophy of the chain militated strongly against man's pride in his position in the universe. Mr. Lovejoy argues very effectively and with a good deal of evidence that "the immense influence of the complex of ideas which was summed up in the cosmological conception of the Chain of Being tended chiefly, in the period with which we are now concerned [the eighteenth century], to make man not unbecomingly sensible of his littleness in the scheme of things, and to promote a not wholly unsalutary modesty and self-distrust." Lovejoy's four arguments are based chiefly on the position of man in the scale, a rank above animals perhaps, but still very low, and separated from animals only by disturbingly minute differences. See *The Great Chain of Being,* 186–200. But Buffon in the *Histoire Naturelle* and Goldsmith in *Animated Nature* present a different picture. Both emphasize the dignity, power, and superiority of man as the ranking head of the chain. And both had wide influence in disseminating an interpretation of the facts of natural history according to the philosophy of the chain of being. In addition to Goldsmith, there were in England a number of minor popularizers of natural history whose interpretation of the Chain of Being also emphasized the crowning position of man in the chain. Among these men, most of whom are now obscure, were the following: Wil-

Any reader of *Animated Nature* may prove for himself the existence of the Chain of Being in the work. Let him examine some groupings, such as the following lists: anomalous quadrupeds in volume IV, rapacious birds in volume V, cetaceous fish in volume VI. He will observe that the arrangement has been dictated by one or perhaps by all three of the principles which I have listed above. Obviously, I cannot give the complete details of the organization of eight columns. But I should like to present some examples of Goldsmith organizing his hierarchy of creatures.

Goldsmith could not pass from metaphysics to natural history without a transmutation of values. Certain inconsistencies and irregularities exist. But there is no inconsistency or irregularity so great that it materially disturbs the work as a whole, which represents a steadily descending scale. The terminal limits of any group are the most vivid proof of the use of a given principle, and the terminal limits of the entire work, man and the zoöphyte, that "last link in the chain of Animated Nature,"[5] illustrate all three principles I have mentioned.

The creatures in *Animated Nature* fall into five large divisions, each division representing explicitly a lower stage in the scale. The chain begins with animals, which include man and quadrupeds. Quadrupeds rank just below man.[6] Birds occupy the next rank, being inferior to quadrupeds.[7]

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liam Borlase, *The Natural History of Cornwall* (Oxford, 1758), 289–91; Griffith Hughes, *The Natural History of Barbados* (London, 1750), 297; Gilbert White, *The Natural History and Antiquities of Selborne* (London, 1789); T. Robinson, *An Essay Towards a Natural History of Westmorland and Cumberland* (London, 1709), 114 ff.; Benjamin Martin, *The Young Gentleman and Lady's Philosophy in a Continued Survey of the Works of Nature and Art; By Way of Dialogue* (3 vols.; London, 1772–82); T. Pennant, *British Zoology* (4 vols.; London, 1768–70); Richard Bradley, *A Philosophical Account of the Works of Nature . . . tending to the Composition of a Scale of Life* (London, 1739), 217–220; Dru Drury, *Illustrations of Natural History* (3 vols.; London, 1770–1782), I, 99–102. To this list may be added the works of some authentic scientists: Henry Baker, *An Attempt Towards a Natural History of the Polype: in a Letter to Martin Folkes* (London, 1743), 96; *The Microscope Made Easy* (London, 1743), 102, 309; *Employment for the Microscope* (London, 1753), 307; George Edwards, *A Natural History of Uncommon Birds, and of Some Other Rare and Undescribed Animals* (4 vols. in 2; London, 1743–51), the Preface; John Ellis, *An Essay Towards a Natural History of the Corallines* (London, 1755), 103.

[5] *An History of the Earth and Animated Nature* (8 vols.; London, 1774), VIII, 161.

[6] *Ibid.*, II, 309.

[7] ". . . though they [birds] fall below quadrupedes in the scale of Nature, and are less imitative of human endowments; yet they hold the next rank, and far surpass fishes and insects, both in the structure of their bodies and in their sagacity" (*Ibid.*, V, 2).

Fish, in the next rank, are inferior in every respect to those above them.[8] Frogs, lizards, and serpents are ranked next.[9] Insects, the fifth class, "deserve but the last and lowest rank in Animated Nature."[10]

Let us consider the principle of diminishing size.[11] Throughout *Animated Nature*, Goldsmith echoes not only the facts but also the ideas of Buffon's *Histoire Naturelle*. Buffon frequently draws the connection between the inferiority of a creature, its small size, and its necessary numerousness.

He writes on one occasion:

> Il paroît par ce que nous venons de dire, que les espèces les plus viles, les plus abjects, les plus petites à nos yeux, sont les plus abondantes en individus, tant dans les animaux que dans les plantes; à mesure que les espèces d'animaux nous paroissent plus parfaites, nous les voyons réduites à un moindre nombre d'individus.[12]

With diminishing size go many imperfections. The smallest creatures are weak and contemptible. They are vile and abject, useless or noxious to man. "Indeed," Goldsmith writes, "if we look through the different ranks

[8] "The fish . . . seems as well furnished with the means of happiness as quadrupedes or birds; but if we come to examine its faculties more nearly, we shall find it very much their inferior." *Ibid.*, VI, 155.

[9] Goldsmith gives little explanation for this ranking. Their classification, he says, has never been agreed upon by naturalists. *Ibid.*, VII, 112. However, he also stresses the group as belonging to "the lower ranks of Nature," VII, 145.

[10] *Ibid.*, VII, 234–38. Goldsmith cites the imperfections of the class of insects, imperfections in formation and in instinct. Their great numbers are also evidence.

[11] Diminishing size, as I have stated, is a relative matter, for a swallow occupies a higher rank than that of a dolphin. But within a given class or species, the most superior creature is the largest. See, for example, Goldsmith's discussion of the Cat Kind, (III, chap. vii), which descends from the lion to the cat. See especially pp. 253, 255, 258 and a closing paragraph, pp. 267–68, which emphasizes diminishing size in the descending scale.

[12] "Comparaison des Animaux & des Végétaux," *Histoire Naturelle* (52 vols.; Paris, 1785–91), XXXIII, 18. See also in the same article, pp. 16–17. See also "Le Lièvre," *Histoire Naturelle*, II, 75–77, where Buffon writes: "Les espèces d'animaux les plus nombreuses ne sont pas les plus utiles; rien n'est même plus nuisible que cette multitude de rats, de mulots, de sauterelles, de chenilles, & de tant d'autres insectes dont il semble que la Nature permette & souffre, plutôt qu'elle ne l'ordonne, la trop nombreuse multiplication. . . ."

Buffon repeats the theory frequently. The following are typical:

"L'ordre, dans la multiplication des animaux, étant en raison inversée de l'ordre de grandeur . . ." ("De La Nature: Seconde Vue," *Histoire Naturelle*, IV, xxx).

". . . qu'uniquement attentive à la conservation de chaque espèce, elle [nature] fait profusion d'individus & se soutient par le nombre dans toutes celles qu'elle a réduites au petit, ou qu'elle a laissées sans forces, sans armes, & sans courage . . ." ("Le Rat," *Histoire Naturelle*, II, 209).

of animals, from the largest to the smallest, from the great elephant to the diminutive mouse, we shall find that we suffer greater injuries from the contemptible meanness of the one, than the formidable invasions of the other."[13] Small creatures multiply in the largest proportion because they have no other defense for preserving their species. Strong, large, and powerful creatures like the elephant and the lion rank high in the Chain of Being. "Mild, peaceful, and brave,"[14] the elephant never abuses its force or strength. Accounts of the lion indicate that "his anger is noble, his courage magnanimous, and his disposition grateful."[15] Large creatures are more perfectly formed, more noble, more formidable, and produce more slowly.

Observe how land-birds range from the ostrich, "the largest of all birds,"[16] down through the eagle, the turkey, the pigeon, to the humming bird. Observe how fish descend from the whale and its varieties, "as many degrees raised above other fishes in their nature, as they are in general in their size,"[17] to spinous fish, the cod, herring, etc. Within a minor grouping, that of anomalous birds headed by the ostrich, the four birds, (1) ostrich, (2) emu, (3) cassowary, (4) dodo descend according to size, with explicit comments on that fact by Goldsmith.[18] Within the restricted class of cetaceous fish, the four species (1) the whale, (2) the narwhale, (3) the cachalot, (4) the dolphin also grow steadily inferior according to their diminishing size.[19]

Let us consider another principle, that of the "shades," the imperceptible gradations which keep the chain unbroken. There must be no gaps in the hierarchy of beings, no "chasms" in nature. A "shade," by filling a "chasm" which would otherwise be left untenanted, proves the structure and reality of the chain.

Imperceptible gradations,[20] which can thus provide links and transitions,

[13] *Animated Nature,* IV, 64.

[14] *Ibid.,* 254. The source of the statement is Buffon, "L'Éléphant," *Histoire Naturelle,* IV, 197.

[15] *Ibid.,* III, 218. The source of the statement is Buffon, "Le Lion," *Histoire Naturelle,* III, 80.

[16] *Ibid.,* V, 49.

[17] *Ibid.,* VI, 181.

[18] *Ibid.,* V, 49, 63, 67.

[19] *Ibid.,* VI, 189, 207, 213, 218.

[20] The imperceptible gradations of nature were one of the main theses of Buffon in the *Histoire Naturelle.* Buffon expressed the theory early in the work, in the "Premier Discours," where he discusses scientific method. "Parcourant ensuite successivement & par ordre les différens objets qui composent l'Univers & se mettant à la tête de tous les êtres créés, il verra avec étonnement qu'on peut descendre par des degrés presqu' insensibles, de la créature la plus parfaite jusqu'à la matière la plus informe, de l'animal le mieux organisé jusqu'au minéral le plus brut; il reconnoîtra que ces nuances imperceptibles sont le grand oeuvre de la Nature; il les

are an integral part of Goldsmith's organization. This device is more than mechanical. It is obvious that when Goldsmith fills a "chasm" or emphasizes a "shade," he is doing more than connecting all parts of his work with the Chain of Being. He is also proving or justifying the chain. *Animated Nature* is not merely a natural history grouped according to the Chain of Being. It actually becomes the Chain of Being. From a practical point of view the gradations are very useful. Through them, Goldsmith justifies including a creature in his work; he justifies the position of a creature in a particular place by showing its relation to creatures preceding and following; he justifies the relation of the creature to the work as a whole; and he emphasizes the creature by giving it great significance.

Many of the major classes of creatures in *Animated Nature* are connected by "shades." The ostrich is the imperceptible gradation between quadrupeds and birds;[21] the manati, between quadrupeds and fish;[22] the hog, between granivorous and carnivorous quadrupeds;[23] the crane, between

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trouvera, ces nuances, non-seulement dans les grandeurs & dans les formes, mais dans les mouvements, dans les générations, dans les successions de toute espèce" (*Histoire Naturelle,* XXXI, 16–17). And again: ". . . la Nature marche par des gradations inconnues, & par conséquent elle ne peut pas se prêter totalement à ces divisions, puisqu'elle passe d'une espèce à une autre espèce, & souvent d'un genre à un autre genre, par des nuances imperceptibles; de sorte qu'il se trouve un grand nombre d'espèces moyennes & d'objets mi-partis qu'on ne sait où placer, & qui dérangent nécessairement le projet du système général, . . ." ("Premier Discours," *Histoire Naturelle,* XXXI, 17).

[21] "In beginning with the feathered tribe, the first animal that offers seems to unite the class of quadrupeds and of birds in itself. While it has the general outline and properties of a bird, yet it retains many of the marks of the quadrupede. In appearance the ostrich resembles the camel, and is almost as tall; it is covered with a plumage that resembles hair much more nearly than feathers, and its internal parts bear as near a similitude to those of the quadrupede as of the bird creation. It may be considered, therefore, as an animal made to fill up that chasm in Nature which separates one class of beings from another" (*Animated Nature,* V, 49). The source is Buffon, "L'Autruche," *Histoire Naturelle,* XIV, 186.

[22] "We come, in the last place, to an animal that terminates the boundary between quadrupedes and fishes. . . . In short, it forms the link that unites those two great tribes to each other; and may be indiscriminately called the last of beasts, or the first of fishes" (*Animated Nature,* IV, 182–83). Cf. Buffon, "Le Lamantin," *Histoire Naturelle,* VI, 265–66. "Dans le règne animal, c'est ici que finissent les peuples de la terre, et que commencent les peuplades de la mer; le Lamantin, qui n'est plus quadrupède, n'est pas entièrement cétacée: il retient des premiers deux pieds ou plutôt deux mains. . . ."

[23] "Animals of the hog kind seem to unite in themselves all those distinctions by which others are separated. They resemble those of the horse kind in the number of their teeth, which in all amount to forty-four, in the length of their head, and in having but a single stomach. They resemble the cow kind in their cloven hoofs and

land birds and water fowl.[24] "Shades," however, provide minuter links. The Water-hen and the Bald Coot are the "shade" between the crane-kind (itself a shade) and water fowls proper.[25] The zoöphyte, the "shade" which concludes the entire work, connects animate and inanimate nature.[26]

The third and final principle of Goldsmith, the superior position of man in the chain, is a theme which runs throughout Buffon's *Histoire Naturelle*. Buffon's emphasis upon man's proud position ranges from very simple statements[27] to lengthy discussions. He argues that man's power over other creatures[28] and man's skill in domesticating them[29] are evidences of man's superiority. Animals may be classed as superior or inferior according to the degree with which their anatomical conformation approaches that of man.[30] Furthermore, man does *not* "shade" by imperceptible gradations

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the position of their intestines; and they resemble those of the claw-footed kind in their appetite for flesh, in their not chewing the cud, and in their numerous progeny. Thus this species seems to fill up that chasm which is found between the carnivorous kinds and those that live upon grass; being possessed of the ravenous appetite of the one, and the inoffensive nature of the others" (*Animated Nature*, III, 171). Buffon gives a longer, more technical description of the hog's affinity to other animals, and concludes: "Tout ce que l'on pourroit dire, c'est qu'il fait la nuance, à certains égards, entre les *solipèdes* & les *pieds fourchus*, & à d'autres égards entre les *pieds fourchus* & les *fissipèdes* . . ." (*Histoire Naturelle*, I, 199).

[24] "The progressions of Nature from one class of beings to another, are always by slow and almost imperceptible degrees. She has peopled the woods and the fields with a variety of the most beautiful birds; and, to leave no part of her extensive territories untenanted, she has stocked the waters with its feathered inhabitants also. . . . But between the classes of land-birds that shun the water, and of water-fowl that are made for swimming and living on it, she has formed a very numerous tribe of birds, that seem to partake of a middle nature; that, with divided toes, seemingly fitted to live upon land, are at the same time furnished with appetites that chiefly attach them to the waters. These can properly be called neither land-birds, nor water-fowl, as they provide all their sustenance from watery places, and yet are unqualified to seek it in those depths where it is often found in greatest plenty" (*Animated Nature*, V, 365–66).

[25] "Before we enter upon water-fowls, properly so called, two or three birds claim our attention, which seem to form the shade between the web-footed tribe and those of the crane kind. . . . The birds in question are, the Water-hen, and the Bald Coot" (*Animated Nature*, VI, 36).

[26] "They [the zoöphytes] seem a set of creatures placed between animals and vegetables, and make the shade that connects Animated and Insensible Nature (*Ibid.*, VII, 244).

[27] Buffon, *Histoire Naturelle*, "De la Nature: Premiere Vue," IV, xiv–xv; "Comparaison des Animaux & des Végétaux," XXXIII, 6.

[28] *Ibid.*, "Les Animaux domestiques," I, 6, 9–10; "Le Cheval," I, 13; "Les Animaux sauvages," II, 11; "Le Castor," III, 34.

[29] *Ibid.*, "Premier Discours," XXXI, 38.

[30] *Ibid.*, "Discours sur la Nature des Animaux," XXXV, 284–85.

into other classes of creatures, a fact which indicates a unique position among created beings.[31] Man's great distinction is his reason,[32] a faculty infinitely superior to the blind, mechanical instinct which guides animals.[33]

Goldsmith echoes the ideas of Buffon when he makes man a focal point in the organization of *Animated Nature*. In the first place, Goldsmith writes, man has the most perfect structure:

> As in mechanics the most curious instruments are generally the most complicated, so it is in anatomy. The body of man presents the greatest variety upon dissection; quadrupedes, less perfectly formed, discover their defects in the simplicity of their conformation; the mechanism of birds is still less complex; fishes are furnished with fewer organs still; whilst insects, more imperfect than all, seem to fill up the chasm that separates animal from vegetable nature.[34]

But it is not only his anatomical perfection which puts man at the head. In the second place, man has great influence upon all the creation, in subduing and domesticating animals. Animals may thus be considered in a relation to man, according to whether they are domestic or savage. As a result of their nature, animals will bear toward man "constant services" or "unceasing hostilities."[35]

It follows, then, in the third place, that an animal may be ranked according to its usefulness or noxiousness to man.[36]

> Every creature becomes more important in the history of Nature in proportion as it is connected with man. In this view, the smallest vegetable, or the most seemingly contemptible insect, is a subject more deserving attention than the most flourishing tree or the most beautiful of the feathered creation. In this view the falcon is a more important animal than the eagle or the vulture. . . .[37]

From various points of view, then, creatures may be grouped with man as a focal point. Whether or not creatures are similar in conformation to man, whether they are domestic or savage, granivorous or carnivorous, harmless or rapacious, useful or noxious, may decide their rank in the scale. A creature may be serviceable to man merely by being harmless. It may be positively or negatively useful. Its rapacity need not particularly harm man, but the rapacity will cut the creature off from man.

[31] *Ibid.*, "De la Nature de l'Homme," XXXIV, 127–28.

[32] *Ibidem.*

[33] *Ibid.*, 125–27. See also "Discours sur la Nature des Animaux," XXXV, 276–91.

[34] *Animated Nature*, V, 3.

[35] *Ibid.*, II, 309.

[36] Cf. Buffon. ". . . il [man] viendra à juger les objets de l'Histoire Naturelle par les rapports qu'ils auront avec lui; ceux qui lui seront les plus nécessaires, les plus utiles, tiendront le premier rang . . ." (Premier Discours," *Histoire Naturelle*, XXXI, 38).

[37] *Animated Nature*, V, 117.

The major divisions of the work, which have already been shown to be a descending scale from more than one point of view, also emphasize descending inferiority in relation to man. Quadrupeds are ranked just below man, and receive a good deal of admiration for their structure. "In taking a cursory view of the form of quadrupedes," writes Goldsmith, "we may easily perceive that, of all the ranks of Animated Nature, they bear the nearest resemblance to man."[38] This similitude is in both external and internal conformation.[39] Quadrupeds also have a fixedness in their nature like that of man. They are less subject to the influence of climate or food than "the lower ranks of Nature."[40] Important as quadrupeds are, they are, nevertheless, subordinate to man, and may be viewed in the relationship of servitude. "If we examine through the various regions of the earth," writes Goldsmith, "we shall find that all the most active, sprightly, and useful quadrupedes have been gathered around man, and either served his pleasures, or still maintained their independence by their vigilance, their cunning, or their industry."

When birds are introduced, their structural inferiority to man is emphasized.

> In a comparative view with man, their formation seems much ruder and more imperfect; and they are in general found incapable of the docility even of quadrupedes. Indeed, what great degree of sagacity can be expected in animals whose eyes are almost as large as their brain? However, though they fall below quadrupedes in the scale of Nature, and are less imitative of human endowments; yet they hold the next rank, and far surpass fishes and insects, both in the structure of their bodies and in their sagacity.[41]

When fish are introduced, they are found to have inferior qualities. The senses of touch, taste, smell, and hearing fall far below those of terrestrial animals.[42] The class of insects provides a fitting conclusion to the major sections of the work, so far as man is concerned. Insects are most imperfectly formed[43] and there are few which are not noxious or useless to man.[44] As has been noted, the terminal limits of any group are the most conspicuous illustration of the scale. Here between quadrupeds and their relation to man, and insects and their relation to man, there is a great division.

[38] *Animated Nature,* II, 310. Cf. Buffon: "Dans la foule d'objets que nous présente ce vaste globe . . . les animaux tiennent le premier rang, tant pour la conformité qu'ils ont avec nous que par la supériorité que nous leur connoissons sur les êtres végétans ou inanimés" (in "Comparaison des Animaux & des Végétaux," *Histoire Naturelle,* XXXIII, [5]).

[39] *Animated Nature,* II, 311.

[40] *Ibid.,* 312.

[41] *Ibid.,* V, 2.

[42] *Ibid.,* VI, 154–59.

[43] *Ibid.,* VII, 235.

[44] *Ibid.,* 236.

A reader may continue the analysis for himself. Goldsmith's first list of quadrupeds begins with the noble horse, a friend to man, and ends with the noxious rat. His second list of quadrupeds begins with the elephant, "the most sagacious animal next to man,"[45] and ends with the gerbua, a useless creature, so poorly formed that it hardly resembles a quadruped.[46] One of the most intricate arrangements involving the relationship of a creature to man is the organization of the six classes of birds. Goldsmith begins with rapacious birds, which are the least useful to man (and also the largest) and descends to the harmless and eminently useful Duck Kind. The classes in between are arranged, not according to a steadily descending scale, but according to a series of double contrasts, frankly a literary device. The relationship to man, however, is never lost sight of.

A reader who analyzes Goldsmith's groupings will also discover that on occasion Goldsmith arbitrarily works the chain both backward and forward. A given list may represent an ascending scale according to one principle, but a descending scale according to another. But the Chain of Being was itself arbitrary. And Goldsmith was probably as interested in securing a literary climax at both ends of a given chain as he was in constructing a logically perfect Chain of Being.

Why did Goldsmith create a literal chain or create a chain at all when he must have known of the devastating attack of Johnson in 1757? Why did he give such prominence to man in the chain?

In the first place, as Mr. Lovejoy has pointed out, the theory of the chain undoubtedly influenced the biological sciences in the eighteenth century. The major sources of *Animated Nature* show the influence of the concept. Buffon's *Histoire Naturelle*, Pluche's *La Spectacle de la Nature*,[47] and *British Zoology*[48] are the most conspicuous in this regard. But Francis Willoughby's *Ornithology*[49] and R. Brookes' *A New and Accurate System of Natural History*[50] also have scattered references. Some of the minor sources, such as the works of Edwards,[51] and Swammerdam,[52] are also imbued with the philosophy. Goldsmith may be said, then, to have adopted

[45] *Ibid.*, IV, 252.

[46] *Ibid.*, 348.

[47] Antoine Noel Pluche, *La Spectacle de la Nature* (8 vols.; Paris, 1732–51). Goldsmith used a translation by D. Bellamy, entitled *Nature Delineated* (4 vols.; London, 1739).

[48] T. Pennant, *British Zoology* (4 vols.; London, 1768–70).

[49] London, 1678.

[50] Six vols.; London, 1763.

[51] George Edwards, *A Natural History of Uncommon Birds, and of Some other Rare and Undescribed Animals* (4 vols. in 2; London, 1743–51).

[52] Jean Swammerdam, *Biblia Naturae*. Goldsmith used a translation by Thomas Flloyd in 1758.

the chain, through the influence not only of Buffon, but also of the other sources to which he turned.

In adopting the chain, Goldsmith probably had two very clear motives, both connected with the fact that he was not a scientist, but a popularizer of one branch of science, natural history. The two chief problems of a natural historian in the eighteenth century were description and classification. But a minute, technical classification and nomenclature like that of Linnaeus in his *Systema Naturae per Regna Tria Naturae*,[53] of John Ray in his *Synopsis methodica animalium quadrupedum et serpentini generis*,[54] or of Jacob Klein in his *Quadrupedum Dispositio Brevisque Historia Naturalis*,[55] was not understandable to the average reader and therefore not interesting.[56] A simpler classification had to be adopted; and a simpler and more interesting classification could be both adopted and justified according to the philosophy of the Chain of Being. For if nature proceeds by imperceptible gradations, then it cannot be forced into the minutiae of genus and species, into the rigid definitions of scientists like Linnaeus, Klein, and Ray. Such technical distinctions, indeed, are a falsification of nature. This theory, which Goldsmith seems to have picked up from Buffon,[57] is explicitly stated in *Animated Nature*,[58] where he justifies his Chain of Being as a classification which is truer to nature than the arbitrary classifications of scientists like Ray, Klein, and Linnaeus. Fundamentally, of course, the motivation for the adoption of a simpler classification lay in the demands which were put upon a popularizer of natural history.

The Chain of Being thus offered Goldsmith a fine literary organization, which seemed philosophically plausible also. It offered excellent and easily manipulated devices for obtaining coherence, transitions, and climaxes. None of his sources and no other natural history which I have examined offers a literary organization equal to that of Goldsmith.

Goldsmith's second motive is also connected with the fact that he was a popularizer. Excluding Buffon and Goldsmith, the popularizers of natural history in the eighteenth century seem to have found that the greatest appeal to readers lay in the interpretation of natural phenomena according to the argument from design. Goldsmith is distinguished among the English popularizers for abandoning the argument from design. Some of the important sources of *Animated Nature* were dominated by a teleological motive, for example, the works of Pluche, Pennant, Swammerdam, Edwards,

[53] Three vols. in 4; Stockholm, 1766–68.

[54] London, 1693.

[55] Leipzig, 1751.

[56] Goldsmith was familiar with all three of these scientific works and used them as sources for *Animated Nature*.

[57] "Premier Discours," *Histoire Naturelle*.

[58] Preface to Volume I and chaps. XIV–XV of Volume II.

and Derham. Other popularizers, mentioned earlier in the present essay (most of whom Goldsmith apparently did not use as sources), were also strongly teleological; for example, Hughes, White, Robinson, Baker, Martin, Ellis, Bradley, and Drury.

But Goldsmith definitely abandoned the argument from design. It is true that some explicit teleological expressions may be found in *Animated Nature* and elsewhere in Goldsmith's writing. But his natural history need only be read in conjunction with Derham's or Martin's or Pennant's for one to be aware of the complete difference in attitude. Moreover, when Goldsmith borrows from natural historians who were dominated by a teleological motive, he alters the material in the borrowing in order to avoid the argument from design.[59] Whatever teleological expressions may be found in *Animated Nature* are completely overshadowed in comparison with the emphasis upon the Chain of Being.

The chief appeal of the argument from design lay in the dignified and powerful position which was given to man. For if Providence had admirably adapted the parts of creatures to their uses, it had even more admirably adapted man. And most creatures were adapted ultimately to man's use. At the very least, the contemplation of nature was destined to lead man's thoughts to God. Man is the focus for the argument from design.

But if Goldsmith preferred a metaphysical nature to a theological nature, he nevertheless relied upon the appeal which the teleologists had used. He made man the focus of interest in his Chain of Being.

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[59] See William Derham, *Physico-Theology* (2 vols.; London, 1798), II, 221, 227–30, 214–19 as the source of Goldsmith's introduction to R. Brookes, *A New and Accurate System of Natural History* (6 vols.; London, 1763) I, xxviii–xxix, which was repeated in *Animated Nature,* II, 314–15, 316–17.

BRENTANO AND FREUD

By Philip Merlan

In her *Historische Grundlagen der Psychoanalyse* (1932) Maria Dorer asserts that the existence of direct relations between Freud and Brentano cannot be proved, unless they were purely personal in character.[1] It is not easy to see what Maria Dorer meant exactly by "personal relations." But owing to the kindness of my former teacher, the late Heinrich Gomperz, I am in a situation to clarify them somewhat.

When Gomperz was preparing the second volume of the biography of his father, Theodor Gomperz,[2] he had to consider the German translation of John Stuart Mill's works, which Theodor Gomperz edited. The translation of the twelfth volume of this edition is the work of Freud;[3] therefore, Heinrich Gomperz became interested in the question of how Freud came into contact with Theodor Gomperz. He wrote a letter to Freud asking for information and received the following reply, dated Vienna IX, June 9, 1932:

"Ich weiss dass ich Ihrem Vater durch Franz Brentano empfohlen worden war. Er hatte in einer Gesellschaft . . . geäussert, dass er einen Übersetzer suche, und Br., *dessen Hörer ich damals oder noch vorher gewesen war,* nannte meinen Namen."

In translation: "I know that I was recommended to your father by Franz Brentano. Your father, at a party . . . mentioned that he was looking for a translator, and Brentano, *whose student I then was or had been at a still earlier time,* named my name." (Italics in the original and in the translation mine.)

Freud's letter is self-explanatory.[4] I desire to add two observations. The first is Heinrich Gomperz' own comment on Freud's letter. Judiciously, Gomperz says: "It is in itself not quite insignificant that Freud,

[1] P. 114.

[2] The first volume of this biography was published under the title: *Theodor Gomperz, Briefe und Aufzeichnungen ausgewählt, erläutert und zu einer Darstellung seines Lebens verknüpft, von Heinrich Gomperz;* 1. Bd (1832–68) (Wien, 1936). The manuscript of the second volume, in the possession of Mrs. Heinrich Gomperz, of Los Angeles, Cal., is ready for printing. The present communication will, I trust, attract the attention of a publisher!

[3] *John Stuart Mill's Gesammelte Werke.* Autorisierte Übersetzung unter der Redaction von Professor Dr. Theodor Gomperz. Zwölfter Band. Vermischte Schriften III. Über Frauenemancipation. Plato. Arbeiterfrage. Socialismus. Übersetzt von Siegmund Freud (Leipzig, 1880).

[4] Freud became a student at the University of Vienna in 1873. Brentano became full professor at the same institution in 1874, to resign in 1880, and to become *Privatdozent* soon afterwards. He staid in Vienna until 1895. Freud received his M.D. degree in 1881 and settled down in Vienna in 1886.

before his twenty-third year, was a student of Brentano's; moreover, a student with whom Brentano was acquainted personally, and who, accordingly, must have been near to him in some way or other. We ought to remember that Freud had always opposed the more or less materialistic medicine of his time, stressing the relative independence of the 'psychic apparatus' from the physical, and in this connection maintained that it is possible to influence psychical maladies psychically. May we speak, perhaps, of a certain after-effect of the influence of a psychologist who, more than any other, distinguished between 'physical' and 'psychic' phenomena and erected his whole doctrine on the basis of this distinction?"

The second observation is this. Brentano's *Psychologie vom empirischen Standpunkt* (1874), contains two discussions of the "Unconscious." One we find in Book I, chapter 3, par. 6, where Brentano presents and refutes the doctrines of Henry Maudsley.[5] First of all, Brentano tries to prove that Maudsley's thesis to the effect that psychology should be based on physiology, is wrong. But he incidentally discusses Maudsley's assertion that the most important part of the activities of the soul, the most essential process on which thinking depends, consists in an unconscious activity of the soul. The other very extensive and respectful discussion of the concept of the unconscious occupies the whole second chapter of the Second Book.[6] True, Brentano's conclusion is that there is no such thing as an "unconscious" psychic activity; but he gives to the problem the most serious consideration, tracing the doctrine asserting the existence of the "unconscious" back to Thomas Aquinas. Is it, therefore, not altogether possible that it was Brentano through whom Freud became acquainted with the problem of the unconscious?[7]

Thus the relation between Brentano and Freud has been clarified. And its content is such that it deserves, I hope, a footnote in a biography of either of the two men. I must still explain how the above mentioned facts came

[5] In the edition of O. Kraus (Leipzig, 1924), 77 ff., part. 81–83. It is worthwhile and sufficient to look up the table of contents in H. Maudsley's, *The Physiology of Mind* (New York, 1883), p. XI f., to receive a vivid impression of a curious blend of ideas anticipating both behaviorism and psychoanalysis. Maudsley rejects introspection, which he wants to replace by the observation of physiological conditions—though he speaks of bodily conditions *underlying* mental manifestations—and insists on the latent existence and influence of ideas in the unconscious.

[6] In Kraus' edition, 141–194.

[7] In his *Der Witz und seine Beziehungen zum Unbewussten,* Freud pays homage to Lipps' *Komik und Humor* as having given him courage to write his book (Sigm. Freud, *Gesammelte Werke,* VI, [London, 1940], 5 n.), to say later on: "I know that whoever is under the spell of a good philosophic education will contradict Lipps' and my assumption of an 'unconscious psychic'" (*ibid.,* 184 f.). Was Freud thinking of his own philosophic education received from Brentano, the spell of which he had to break?

to my knowledge. It so happened that when I came across the statement of Maria Dorer quoted above, I was reminded of a conversation with Heinrich Gomperz in which he had mentioned that Freud knew Brentano personally. I therefore suggested a publication of the relevant facts. He refused, on account of lack of time. But he sent me a copy of Freud's letter, together with a copy of his comments on it, both part of the manuscript of the second volume of his biography of Theodor Gomperz, and gave me his permission to publish this material. This I do herewith, expressing, alack, belated thanks for his kindness.

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ERRATA

The January issue of this Journal contained the following errors:

Pages	*Lines*	*Printed*	*Correct*
66	10	Netlau	Nettlau
124	4th from bot.	Moses, Hess	Moses Hess
ibid.	3rd from bot.	Lathenau	Rathenau
90	Last 3	In 1849 . . .	*

* In 1850 Francis Bowen failed to secure a professorship of history because of Robert Carter's series of articles in the Boston *Atlas* in reply to Francis Bowen's attack on the Hungarian revolutionists [cf. Carter's pamphlets, "The Hungarian Controversy" and "Kossuth in New England" (Boston, 1852)]. Bowen replied in the *North American Review* (Jan. 1851) of which he was editor (from 1843 to 1854). In 1853 Bowen was appointed at Harvard to the Alford professorship of Natural Religion, Moral Philosophy and Civil Polity.

Chauncey Wright's critical review of Bowen's *Treatise on Logic* in the *North American Review* (Oct. 1864, pp. 592–605) attacked Bowen's treatment of Darwin's evolutionary theory in his chapter on Fallacies, and also showed Bowen's miscomprehension of the logic of probabilities, of the scientific meaning of "tendency" and of the method of Least Squares. My statement on page 39, lines 18–20, concerning Bowen's views on the method of Least Squares was not accurate as can be seen from Wright's review (*loc. cit.*, 603).—Philip P. Wiener.

BOOKS RECEIVED

VASSI AND FIDELES IN THE CAROLINGIAN EMPIRE. By Charles E. Odegaard. Cambridge: Harvard University Press, 1945. Pp. 166. Harvard Historical Monographs, XIX.

METHOD FOR THE EASY COMPREHENSION OF HISTORY. By John Bodin. Translated by Beatrice Reynolds. New York: Columbia University Press, 1945. Pp. xxix, 402. $6.00.—First English translation of the *Methodus ad facilem historiarum cognitionem* of Jean Bodin, who lived through four editions (1566, 1572, 1583, 1595). His philosophy of history tried to integrate humanism, theology and law, and emphasized the effect of climate on political structures, a cyclical theory of states, and the concept of sovereignty.

PIONEERING IN PENOLOGY. The Amsterdam Houses of Correction in the 16th and 17th Centuries. By Thorsten Sellin. Philadelphia: University of Pennsylvania Press; London: Oxford University Press, 1944. Pp. 125. $2.50.—The Dutch reformatories which taught criminals to do useful work replaced medieval methods of punishment. "This enlightened attitude toward social misfits paralleled the rising prosperity and republican ideas of the Dutch burghers who derived much of their inspiration from rediscovered classical writings, particularly Plato and Seneca, and from a study of the Bible in the vernacular."

THE DECLARATION OF INDEPENDENCE. The Evolution of the Text as Shown in Facsimiles of Various Drafts by Its Author, Thomas Jefferson. By Julian P. Boyd. Princeton University Press, 1945. Pp. 46, 10 facsimiles. $3.50.

BIBLIOGRAPHY OF THE PUBLISHED WRITINGS OF JOHN STUART MILL. Edited from his Manuscript with corrections and notes by Ney MacMinn, J. R. Hainds, James McNab McCrimmon. Preface by Ney MacMinn. Northwestern University Studies in the Humanities, No. 12. Evanston, Illinois, 1945. Pp. xiv, 101. $2.50.—Annotated list of the letters, speeches, reviews, articles and books published over his name or pseudonyms from 1822 to 1873, as recorded in the manuscript Notebook at the British Library of Political and Economic Science.

CONFIGURATIONS OF CULTURE GROWTH. By A. L. Kroeber. Berkeley and Los Angeles: University of California Press, 1944. Pp. 882. $7.50.—Factual presentation of the clustering of great intellectual and artistic works in the history of the world's cultures which are analyzed by their contributions to the history of Philosophy, Science, Philology, Sculpture, Painting, Drama, Literature, Music, and Nationalism. Discusses also the relation of genius to cultural patterns, universals in history, duration, pulses and lulls in growth of cultures, Spengler's thesis.

PSYCHOLOGY AND LOGIC. By J. R. Kantor. Vol. I. Bloomington, Indiana: The Principia Press, 1945. Pp. xviii, 363.—Logic is "operational,

interbehavioral, specific, uniquely related to culture, inseverably interrelated with psychology, and distinct from language." The history of logical doctrine, its current cultural cross-section, and its psychological aspects are adduced as evidence.

THE MARCH OF MEDICINE. The New York Academy of Medicine Lectures to the Laity, 1944. New York: Columbia University Press, 1945. Pp. 121. $1.75.—Includes "Morale and Propaganda" by E. A. Strecker, "Food and Civilization" by C. G. King, "The Past, Present, and Future of Chemotherapy" by C. M. Macleod, "Medicine and the Changing World" by R. Fitz, "The Effects of Science Upon Human Beings" by Sir Gerald Campbell, "Wars and Epidemics" by Lieut. Col. T. M. Mackie.

THE NEO-IDEALIST POLITICAL THEORY. Its Continuity with the British Tradition. By Frederick P. Harris. New York: King's Crown Press, 1944. Pp. 133. $1.50.—A critical account of the British Idealists' political thought from Thomas Hill Green to Ernest Barker (Bradley, Bosanquet, Utilitarianism, Evolutionism) and its relation to the laissez-faire tradition.

HUMAN NATURE: The Marxian View. By Vernon Venable. New York: Alfred A. Knopf, 1945. Pp. 217. $3.00.—An exposition and defense of Marx's and Engels' historical or dialectical materialism as "the science of human transformation."

ARE MEN EQUAL? An Inquiry into the Meaning of Democracy. By Henry Alonzo Myers. New York: G. P. Putnam's Sons, 1945. Pp. 188. $2.50.—The problem and the historical development of the idea of equality in the United States: "Equality and the American Mind (1776–1856)"; "Slavery and Equality (1856–1861)"; "War, Progress, and Free Enterprise (1861–1941)."

NATIONAL CULTURES, NAZISM AND THE CHURCH. By Andrew J. Krzesinski. Boston: Bruce Humphries, Inc., 1945. Pp. 128. $1.75.—"The elimination of religion and ethics from Nazi ideology has had a disastrous effect upon German life." "Analyzing Western culture, we see the benevolent influence of religion in its ideology."

THE NEW YORK HOSPITAL. A History of Psychiatric Service, 1771–1936. By William Logie Russell. New York: Columbia University Press, 1945. Pp. 556. $7.50.—An account of the earliest, and for almost fifty years, the only provision for the hospital treatment of the mentally ill in the state of New York.

PAINTING AND PAINTERS: How to Look at a Picture. From Giotto to Chagall. By Lionello Venturi. New York: Charles Scribner's Sons, 1945. Pp. xx, 250, 53 plates. $3.50.—Biographical and historical backgrounds of the great painters.

REPRINTS AND PERIODICAL ARTICLES RECEIVED

"On Classical Political Philosophy," by Leo Strauss. *Social Research,* XII, 1 (February, 1945), 98–117.

"Christendom's Cultural Debt to Islam," by T. Cuyler Young. *The Moslem World,* XXXV, 2 (April, 1945), 89–112.

"The French Renaissance of the 12th Century in Music," by Leonard Ellinwood. *Papers Read at the International Congress of Musicology Held at New York, September 11th to 16th, 1939* (New York, 1944), 200–11.

"A Mediaeval Philosophy of Law," by Walter Ullmann. *The Catholic Historical Review,* XXXI, 1 (April, 1945), 1–30.

"Mediaeval Ideas of the End of the World: West and East," by A. A. Vasiliev. *Byzantion,* XVI, 2 (1942–43, published in 1944), 462–502.

"Bishops and Learning in the Reign of Edward II," by Kathleen Edwards. *The Church Quarterly Review,* CXXXVIII, 275 (April–June, 1944), 57–86.

"The Scholastic Background of Marsilio Ficino," by Paul Oskar Kristeller. *Traditio,* II (1944), 257–318.

"Microcosmus: From Anaximandros to Paracelsus," by Rudolf Allers. *Ibid.,* 319–407.

"Classical and Christian Ideas of World Harmony: Prolegomena to an Interpretation of the Word 'Stimmung' " (part I), by Leo Spitzer. *Ibid.,* 409–64.

"The School of Salerno: Its Development and Its Contribution to the History of Learning," by Paul Oskar Kristeller. *Bulletin of the History of Medicine,* XVII, 2 (February, 1945), 138–94.

"The Trebeta Legend: A Study in the Medieval and Humanistic Evaluation of Sources and Historiography," by William Hammer. *The Germanic Review,* XIX, 4 (December, 1944), 241–68.

"The Planet Portraits of Robert Henryson," by Marshall W. Stearns. *PMLA,* LIX, 4, pt. 1 (December, 1944), 911–27.

"Sidney and Other Men's Thought," by Cornell March Dowlin. *Review of English Studies,* XX, 80 (October, 1944), 257–71.

"Articulation and Unity in the Italian Renaissance and in the Modern West," by Hans Baron. *Annual Report of the American Historical Association for 1942,* III (1944), 123–38.

"The Petrarchan Sonneteers and Neo-Platonic Love," by Paul N. Siegel. *Studies in Philology,* XLII, 2 (April, 1945), 164–82.

"Designs by More and Erasmus for a New Social Order," by Robert P. Adams. *Ibid.,* 131–45.

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